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GENERAL STUDIES (TEST CODE : 1050)

Name of Candidate	CHAHAT BAJPAI		
Medium Eng./Hindi	ENGLISH	Registration Number	22842
Center	ORN	Date	24/08/18

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
9	10	
10	10	
11	15	
12	15	
13	15	
14	15	
15	15	
16	15	
17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are TWENTY questions printed in ENGLISH & HINDI
   इसमें बीस प्रश्न हैं अंग्रजी और हिन्दी में छपे हैं।
3. All questions are compulsory.
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

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1. Citizens' Charters make administration both accountable and citizen-friendly. However, over time, in a large number of offices, Citizens' Charters have fallen into disuse. Suggest measures that can make these charters effective tools for bringing accountability in public service. (150 WORDS) 10

नागरिक घोषणापत्र (सिटीजन चार्टर) प्रशासन को जवाबदेह और नागरिक-अनुकूल दोनों बनाते हैं। हालाँकि, समय के साथ, ज्यादातर कार्यालयों में नागरिक घोषणापत्र अप्रचलित हो गए हैं। कुछ ऐसे उपाय सुझाइए जो इन घोषणापत्रों को, लोक सेवाओं में जवाबदेही लाने का प्रभावी उपकरण बना सकते हैं। (150 शब्द)

Citizen's charters are undertaking by offices of the quality of service/goods citizens can expect from them and prescribe mechanism of grievance redressal in case of failure to deliver them.

POTENTIAL TO MAKE ADMINISTRATION ACCOUNTABLE AND CITIZEN-FRIENDLY

1. clearly outline what citizens can expect — thus increase accountability

4. provide grievance redressal mechanism. ← (significance) → 2. provide fees charged — ∴ increase transparency

3. streamline all processes

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REASONS FOR INEFFECTIVENESS

1. Many organisations see it as a burden and have not even framed them.
2. Those who frame do it in a 'set standard format' rather than doing as per local needs.
3. They not disable friendly
4. They are not regularly updated
5. They are not available in local languages
6. Most importantly, they are not enforceable.

MEASURES TO MAKE EFFECTIVE

1. Citizens' right to service delivery bill which is pending since 2011 needs to be passed to provide legal mandate.
2. As 2nd ARC suggest, ~~post~~ offices must designate a certain proportion of fund to regularly update and modify charter.

Further need for attitudinal change in bureaucracy by telling significance of charter.

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2. Discuss the importance of involving civil society in pre-legislative scrutiny and mention the steps that can be taken by the government to increase public engagement in it. (150 WORDS) 10

पूर्व-विधायी जांच में नागरिक समाज को सम्मिलित करने के महत्व पर चर्चा कीजिए और इसमें जन भागीदारी बढ़ाने हेतु सरकार द्वारा उठाए जा सकने वाले कदमों का उल्लेख कीजिए। (150 शब्द)

Pre legislative scrutiny is a stage when the ministries release a bill for public comments before it is tabled / passed in parliament.

IMPORTANCE OF INVOLVING CIVIL SOCIETY

1. Constructive criticism is always essential before a legislation is passed
2. Civil society being closer to people directly represents their opinion
3. Civil society itself is diverse, thus (like caste groups, media, religious organisations) therefore bring opinion of all sections.
4. Further this culminates in better awareness about legislations and in future better implementation.

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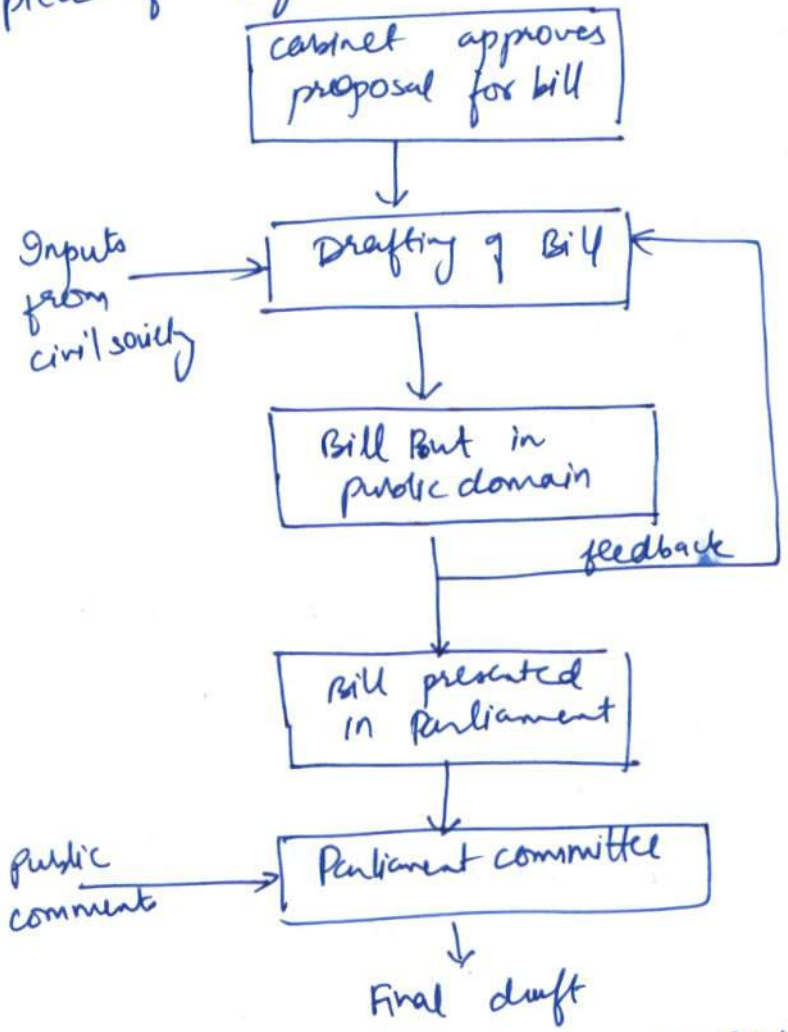
STEPS THAT CAN BE TAKEN

Consultation can be at various stages ~~and~~ ~~th~~ to ensure effective piece of legislation.



Further platforms like mygov etc can be effectively used for it.

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3. Poor standards of tertiary education are a drag on India's competitiveness. Elucidate. Also enumerate the initiatives taken by the government in the past few years to improve the quality of higher education in India. (150 WORDS)

10

तृतीयक शिक्षा के निम्न-श्रेणी के मानक भारत की प्रतिस्पर्धात्मकता में अवरोधक हैं। स्पष्ट कीजिए। साथ ही भारत में उच्च शिक्षा की गुणवत्ता में सुधार लाने के लिए पिछले कुछ वर्षों के दौरान सरकार द्वारा की गई पहलों को भी सूचीबद्ध कीजिए। (150 शब्द)

India is ranked 103rd position among ~~the~~ 130 countries ~~to~~ in Human capital Index of WEF.

A major reason for this is poor quality of higher education. In 2017 ~~to~~ QS ranking of universities only 3 Indian universities figured in top 200 showing their poor competitiveness

POOR QUALITY REASONS

1. ~~In last~~ ~~into~~ In past ~~1~~ decade, sharp rise in number of colleges by 20,000 and number of students enrolled by 8 million but the regulation was not able to keep up.

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2. Multiplicity of regulators reduce accountability like UGC, MCI, AICTE, Bar council etc.

3. Low funding - overall ~~as~~ 4% of GDP while TSR subramanyam committee suggested atleast 6%.

As a results Indian ~~youths~~ graduates are not employable, lack industry relevant skills etc.

MEASURES

1. Institutes of eminence scheme - granting full autonomy to 20 institutes
2. RUSA, HEFA → for funding
3. VAJRA, GIAN → to get foreign faculty
4. Technical education quality improvement program - ~~higher~~ hiring IIT / NIT graduate for teaching in government colleges.
5. Replacing UGC by Higher education Commission of India.

These efforts overall are essential to ~~increase~~ improve present state of affairs. Further private funding needs to increase.

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4. Social audit has a crucial role in effective implementation of social sector programmes. Comment. Also discuss its strengths and limitations. (150 WORDS) 10

सामाजिक क्षेत्र के कार्यक्रमों के प्रभावी कार्यान्वयन में सामाजिक लेखा परीक्षण की महत्वपूर्ण भूमिका है। टिप्पणी कीजिए। साथ ही, इसके मजबूत पक्षों और सीमाओं पर भी चर्चा कीजिए। (150 शब्द)

Social audit is evaluation of the various government programs by beneficiaries, civil society comparing Official records to grand reality.

Its role is very significant in effective implementation of social sector schemes as it makes people a part of monitoring and evaluation process.

This brings to light what are their expectations and whether the scheme is aligned as per them. Also if the funds are properly utilised.

In the light of almost Rs 2 lakh crore grant to PRIs ~~and there they~~ by 14th finance commission and they

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being out of CAG ambit, social audit complements CAG audit.

Strengths	Limitations
- Direct involvement of people	- no institutionalised mechanism.
- increased transparency in welfare schemes	- usually no follow up
- Better fund utilisation.	- since it is an external audit → unaware of administrative hurdles
	- lack of cooperation from officials

Way forward:

- CAG guidelines on social audit should be adopted
- States must pass bill like Meghalaya
- ~~set~~ make it mandatory in legislative process like MNREGA

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5. What are the major welfare schemes for elderly in India? Do you think the benefits of such schemes are reaching a wide section of the target segment? Give reasons. (150 WORDS) 10

भारत में वृद्धजनों के लिए प्रमुख कल्याणकारी योजनाएँ कौन-सी हैं? क्या आप मानते हैं कि इस प्रकार की योजनाओं का लाभ लक्षित हिस्से के एक वृहत् भाग तक पहुँच रहा है? कारण बताइए। (150 शब्द)

Elderly people that is those above 60 years of age account for 8% of India's population. (census 2011)

VARIOUS WELFARE SCHEMES

1. Old age pension - given to widows every month who are devoid of any social benefits
2. Vayoshri yojana - to provide subsidised aids to old people like hearing aids.
3. fixed interest rate of 8% is given to elderly on life savings
4. Maintenance of elderly ~~act~~ parents act - provide a legal provision that children must provide maintenance to parents.
   - also right to shared household.
5. food security through PDS

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Benefits of these schemes are unable to reach wide sections as visible from fact that a majority of elderly above 70 years of age are forced to work to earn their livelihood.

Also UN Population fund estimates that reach of ~~elg~~ elderly pension is limited.

To enhance the coverage, the responsibility of monitoring, expansion can be given to local bodies

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6. Welfare policies in India have undergone a paradigm shift in recent decades, yet they retain certain elements of continuity. Discuss with examples. (150 WORDS) 10

हाल के दशकों में भारत में कल्याणकारी नीतियों में मूलभूत बदलाव (पैराडाइम शिफ्ट) आए हैं, फिर भी उनमें निरंतरता के कुछ तत्व बने हुए हैं। उदाहरण सहित चर्चा कीजिए। (150 शब्द)

Right from Independence, government committed itself to welfare of people. for this planning commission laid down detailed plan.

CHANGE IN RECENT DECADES

1. Change from passive beneficiary to rights based approach like MNREGA guarantees right to work.

2. Shift from top down to bottom up approach : especially after 73rd / 74th amendment act role of local bodies has become paramount.

3. Focus on direct cash transfer — like talks of UBI, use of JAM trinity so that agency shift to the beneficiary.

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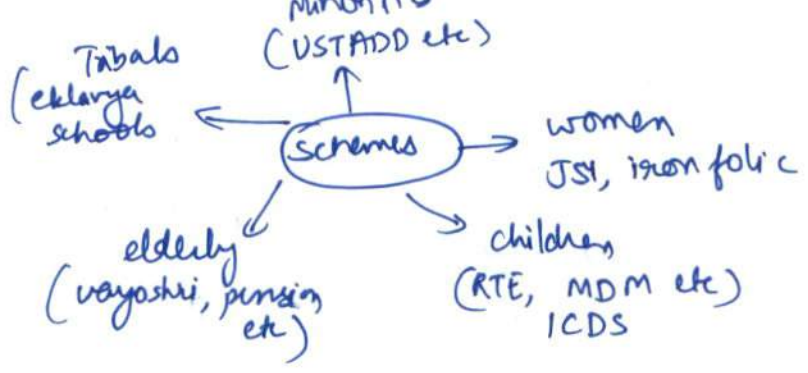
4. More leeway to states with greater fund transfer and restructuring of CSS like after 14th FC (32% to 42%)

5.

YET, certain elements of continuity still visible:

1. Schemes have been <u>inclusive</u> focusing on all weaker sections of society.



This shows role of government in providing welfare measures has not reduced.

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7. Discuss whether changes recommended by the Law Commission in its 268th report can help in addressing the problems of undertrials languishing in jails in India. What other measures can be taken in this regard? (150 WORDS) **10**

चर्चा कीजिए कि क्या अपनी 268वें रिपोर्ट में विधि आयोग द्वारा अनुशंसित परिवर्तन, भारत में कारागारों में सजा काट रहे विचाराधीन कैदियों की समस्याओं को दूर करने में सहायता कर सकते हैं। इस सन्दर्भ में अपनाए जा सकने वाले अन्य उपाय कौन-से हैं? (150 शब्द)

Undertrials are prisoners who are serving sentence while there case is being adjudicated by the court. Many of them keep languishing in jails due to lack of financial resources or family support to file for bail.

Law Commission in its 268th report has highlighted the problem of undertrials. It highlighted that average occupancy of Indian jails is 117% primarily because of several undertrials.

For this it suggested giving ~~them~~ bail to those who has served half of the maximum possible sentence for their offence on personal

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bond.

Other measures

1. Strengthening criminal justice system — to reduce judicial delays like by adoption of Malimath committee report in this regard.

2. Allow them to meet family and friends.

3. Ensuring free legal ~~aga~~ aid as also mandated by article 39A of constitution.

4. Problem of undertrials is very serious. It needs to be resolved through appropriate reforms so that justice is not denied to anyone and a person doesnot remained confined regardless of case under adjudication.

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8. While various government initiatives and policies have created opportunities in the affordable housing segment, there are challenges that still persist. Discuss. (150 WORDS) **10**

यद्यपि विभिन्न सरकारी पहलों और नीतियों ने वहनीय आवास के क्षेत्र में अवसरों का सृजन किया हैं, लेकिन कुछ ऐसी चुनौतियाँ हैं जो अभी भी बनी हुई हैं। चर्चा कीजिए। (150 शब्द)

Government has set the target of housing for all by 2022' in its vision for New India 2022. It have various components like -

1. credit linked subsidy
2. concessional credit to LIG/MIG
3. transfer of completed houses
4. slum redevelopment

But despite this there is a shortage of almost 10 million houses in urban areas.

CHALLENGES :

1. Land acquisition in urban area — land is already scarce and costly.
2. Houses alloted are far from place of work, therefore people are

Don't write anything this margin (इस भाग में कुछ ना लिखें)

unwilling to relocate.

3. Rate of completion of projects is slow as till now only 8 lakh houses have been sanctioned or completed.

Such challenges need to be addressed through cooperation among various ministries.

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9. Demographic dividend may become demographic liability in the absence of adequate skill development. In this context, discuss the importance of National Policy for Skill Development and Entrepreneurship, 2015. (150 WORDS) **10**

समुचित कौशल विकास के अभाव में जनसांख्यिकीय लाभांश, जनसांख्यिकीय दायित्व बन सकता है। इस संदर्भ में, राष्ट्रीय कौशल विकास एवं उद्यमिता नीति, 2015 के महत्व पर चर्चा कीजिए। (150 शब्द)

India is standing at junction of demographic window with 65% population in working age group and median age of 29.

This demographic windows offers opportunity for reaping faster benefits through entrepreneurial and innovative potential of youth. However, if youths are not adequately trained, they can get in drug addictions, crime, thus becoming a liability.

SIGNIFICANCE OF NATIONAL POLICY FOR SKILL DEVELOPMENT AND ENTREPRENEURSHIP 2015

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1. For the first time, it brought skill development to the top of the priority.
2. It aims to train 100 million people in 5 years.
3. It recognise significance of collaboration with voluntary organisations, private players
4. It also grants recognition to prior learning in an effort to formalise the skill training
5. It aims to expand ITIs, at the same time evolve industry relevant curriculum for them.

At this time, this was a much needed policy.

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10. Highlight the need for whistleblower protection in India. Critically analyze whether the Whistleblower Protection Act provides sufficient protection to the whistleblowers. (150 WORDS) **10**

भारत में व्हिसलब्लोअर सुरक्षा की आवश्यकता पर प्रकाश डालिए। आलोचनात्मक विश्लेषण कीजिए कि क्या व्हिसलब्लोअर सुरक्षा कानून व्हिसलब्लोअर को पर्याप्त सुरक्षा उपलब्ध कराता है। (150 शब्द)

Whistleblower are people who risk their lives while disclosing some wrongdoing in the organisation for the cause of public interest.

Need for whistle blower protection

1. Presently in India, there is no law to protect whistleblower. Whistleblower protection Bill 2014 is yet to be passed.
2. To complement RTI in bringing transparency and accountability
3. Almost 75 officials have lost their lives in past 3 years. Law is needed to protect honest officials against victimisation and harrassment.

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Whistle blower protection Act has several positive provisions –

1. It expands definition to cover members of NGOs also
2. It provides setting up ~~an~~ competent authority where a person can disclose any wrongdoing in government
3. It assumes complete anonymity.

However, there are some issues:

1. Proposed amendments remove exemption of official secrets act and those which cannot be reveled by RTI
2. Competent authority is an internal authority therefore fear of harrassment.
3. It exempts army – other instances of corruption might not come to light.

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11. What are the factors which have been responsible for slow pace of growth of coverage under the Universal Immunisation Programme (UIP). Enumerate the recent steps taken by the government in order to increase this pace to achieve universal coverage swiftly. (250 WORDS) **15**

सार्वभौमिक प्रतिरक्षण कार्यक्रम (UIP) के अंतर्गत कवरेज में वृद्धि की धीमी दर के लिए कौन-से कारक उत्तरदायी रहे हैं? सार्वभौमिक कवरेज को शीघ्रातिशीघ्र प्राप्त करने की इस गति में वृद्धि करने के लिए सरकार द्वारा उठाए गए हालिया कदमों का उल्लेख कीजिए। (250 शब्द)

Universal Immunisation Program (UIP) was launched to achieve the target of global vaccine agenda plan 2012 which aims to achieve universal immunisation by 2020.

HOWEVER, as NFHS survey 2015-16 shows the immunisation coverage has increased to only 62% compared to 44% in 2005-06.

FACTORS RESPONSIBLE FOR SLOW GROWTH

1. Socio-cultural factors – beliefs that vaccination is a attempt to 'sterlise the child'

2. Logistics issue – poor supply chain management leading to supply of

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expired, unhygienic medicines/vaccines.

3. Low reach to most excluded sections like urban poor, construction workers, brick kilns etc

4. Migratory nature of some communities - difficult to monitor as child also move.

UIP aimed to provide vaccines to 12 diseases free of cost. Other steps taken by government to supplement it are :

1. Mission Indradhanush - revamped version of UIP to give a new push to the scheme -
- Intensified mission Indradhanush focus specifically on all children below 2 years of age and pregnant women.

2. Financial incentives to ASHA

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workers.

3. Awareness generation – In April World Vaccine week was celebrated with theme of "Vaccine work"

4. Supply chain management through monitoring of cold storages, stocks via eVin portal of UNDP

5. Use of technology like mother and child tracking network.

India has successfully eradicated Polio through a multi-sectoral campaign of training healthcare workers, social media - mass media campaigns. Such experiences should be successfully employed elsewhere also.

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12. Highlight the ways in which digital divide perpetuates and manifests itself in India. Discuss the importance of steps taken by the government to bridge this divide. (250 WORDS) **15**

उन तरीकों पर प्रकाश डालिए जिनके चलते भारत में डिजिटल अंतराल निरंतर बना हुआ है तथा स्पष्टत: दृष्टीगोचर होता है। इस अंतराल को पाटने के लिए सरकार द्वारा उठाए गए कदमों के महत्व पर चर्चा कीजिए। (250 शब्द)

Digital divide is a term that is used to refer to a situation of 'have's and have nots of access to internet.

In India it perpetuates across gender, age, economic status as well as literacy standards of an individual.

MANIFESTATIONS IN INDIA

1. Due to digital access - over 500 million people in India still donot have access to internet access, which is a prerequisite for digital connectivity.

2. Affordability - cost of mobile phones have come down but laptops are still unaffordable to vast majority

Don't write anything this margin (इस भाग में कुछ ना लिखें)

of Indians.

3. Due to lack of education - NSSO survey in 2016 found only 8% computer literacy in rural India

4. Language barriers - most of the content on internet is in English and not in regional languages

5. Gender - ASER survey found that 73% of ~~youths~~ young boys in 14-18 years have used mobile phone compared to only 23% girls.

6. Across age - fast pace of digital transformation has left old, middle-aged people behind.

World Development Report 2016 highlighted how unequal distribution of digital dividends can further strengthen economic, social ~~and~~ inequalities and limit political

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participation of millions of Indians.

STEPS TAKEN BY GOVERNMENT

1. NOFN or ~~Bharnet~~ Bharatnet project : aims to take internet connectivity to 2.5 lakh gram panchayats.
2. Digishala, adult literacy campaigns
3. PPP → collaboration with Google by AP government in free space optical connectivity.
4. Language Barriers - innovations by C-DAC a multilingual chip which make a device operable in all major languages of India.
5. Free wifi hotspot proposed in budget 2018.

Further, government can accept ~~the~~ recommendation of Chandrababu Naidu Taskforce to give subsidy on purchase of mobile phones to poor.

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13. What are the objectives of National Health Mission? Why, in your opinion, non-communicable diseases have acquired salience in recent times? What are its implications for health policy in the country? (250 WORDS) **15**

राष्ट्रीय स्वास्थ्य मिशन के उद्देश्य क्या हैं? आपकी राय में, गैर-संचारी रोगों ने हाल के दिनों में क्यों ध्यान आकृष्ट किया है? देश में स्वास्थ्य नीति के लिए इसके निहितार्थ क्या हैं? (250 शब्द)

National Health Mission was launched in 2005, with following objectives :

1. To ensure universal coverage of quality and affordable health services.
2. To train and equip manpower as per the growing needs.
3. To enhance immunisation coverage to 100%.
4. To reduce MMR below 100, through maternal care like institutional deliveries.
5. To collaborate with private sector, voluntary organisations to achieve these goals.

It had 2 components – NHM (Rural and NHM – Urban inorder

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to address specific needs in both regions.

The state of disease level report of ICMR showed that non-communicable diseases have emerged as a major burden in recent times. ~~The~~ Its proportion stood at 60% in 2015 compared to below 40% in 1992.

REASONS FOR RISE

1. Tobacco use - India has world's 2nd largest tobacco users at 10 crore (Global Adult Tobacco Survey). It is a major cause of cancer.
2. Sedentric lifestyle - with urbanisation the lifestyle involves much less physical activity.
3. Increased consumption of high fat and junk food.

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4. Adulteration in food, also use of chemical fertilisers, pesticides.
5. Air / water pollution In 2015 12 / 20 cities in WHO list of most polluted cities were from India.

As a result of this, there is a need for policy shift to address these demands.

IMPLICATION OF HEALTH POLICY :

1. Need to be multi-sectoral like focus on clean environment, push for organic farming.
2. Need to increase awareness about dietary choices - also implications like India 'diabetes capital of world with 8 crore (presently).
3. Need to train manpower accordingly like more cardiac, pulmonary doctors.
4. Need for integration of medicines → Yoga, Ayush.

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14. Over the years, there has been a growing realisation that undue interference from the State, lack of autonomy and widespread politicisation has severely impaired the functioning of Cooperative sector and there is a need to introduce urgent reforms in the Cooperative sector. Discuss. (250 WORDS) **15**

समय के साथ, यह अधिकाधिक अनुभव किया जा रहा है कि राज्य द्वारा अनुचित हस्तक्षेप, स्वायत्तता की कमी एवं व्यापक राजनीतिकरण ने सहकारी क्षेत्र के कार्यकरण को गंभीर रूप से विकृत किया है तथा सहकारी क्षेत्र में तत्काल सुधार लाने की आवश्यकता है। चर्चा कीजिए। (250 शब्द)

Cooperatives are voluntary organisations of ~~prop~~ like minded people who collectively derive profit to from organisations which are democratically managed and collectively owned.

They have huge potential in -

1. expansion of cheap / timely credit.
2. ~~co~~ milk sector
3. ensure a collective bargain to farmers.

Given this right from independence Planning commission and NDC took over task of promoting cooperatives. However this has created multiple problems like :

CHALLENGES

1. Undue interference - Often the management

Don't write anything this margin (इस भाग में कुछ ना लिखें)

boards are dismissed by state government
- bureaucrats appointed in board.

2. Lack of autonomy - due to meddling in day to day management, dependence on funds, subsidies.
- Thus 'self help' not able to be inculcated in members.
- They also find it difficult to retain active members.

3 Widespread politicisation - has affected the democratic mode of working.

4. Others : inefficiency due to huge manpowers, unable to compete with MNCs.

In the light of this 1st generation of reforms in management and functioning of cooperative came up with 97th amendment act which made it immune from state's influences.

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FURTHER REFORMS NEEDED

1. Promote principle of 'self help' - like through reducing subsidies, concessions
2. Timely conduction of elections
3. Technological accumen needs to be built to cut cost of operations.
4. Implementation of Vaidhyanathan committee recomendations.

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15. With the current system of health financing in India being largely out-of-pocket payments, examine the need for reforms in healthcare finance. Also discuss the issues associated with reinforcing insurance as the long-term strategy for health financing in this regard. (250 WORDS) **15**

भारत में स्वास्थ्य वित्तपोषण की वर्तमान प्रणाली के अंतर्गत बड़े पैमाने पर आउट-ऑफ-पॉकेट भुगतान किए जाते हैं, ऐसे में स्वास्थ्य देखभाल वित्तपोषण में सुधार लाने की आवश्यकता का परीक्षण कीजिए। इस संबंध में स्वास्थ्य वित्तपोषण के लिए दीर्घावधिक रणनीति के रूप में बीमा को सुदृढ़ करने से संबद्ध मुद्दों पर भी चर्चा कीजिए। (250 शब्द)

Health is a critical dimension of human capital formation. However healthcare sector in India is highly unaffordable.

Out of pocket expenditure in India is as high as 70% compared to 20-25% in other BRICS countries. As a result of this, a planning commission taskforce estimated in 2012 that nearly 4 crore people are pushed into poverty every year.

NEED FOR REFORM

1. To ensure equity and fulfil the constitutional obligation in article 47
2. To protect consumers from reckless

Don't write anything this margin (इस भाग में कुछ ना लिखें)

profiteering by private sectors like Fortis charged 16 lakh for a dengue treatment.

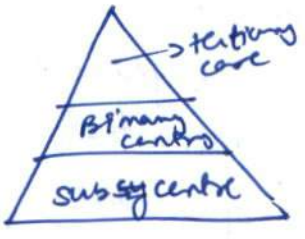
3. To ensure justice NSSO survey estimates that 75% people use their life savings for treatment, 18% borrow it.

4. To fulfil obligations of SDG 3

POSSIBLE SOLUTIONS

1. Strengthening of public care sector:

India has 3-tier health care system.



- presently 61% of primary centres have only 1 doctor, and 4% donot have electricity access
- out of sanctioned strength of 80,000 manpower for subcentres there are almost 50% vacancies.

These needs to be bright bridged.

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2. Involvement of private sector –
- like mandating them to reserve certain percentage of services for EWS (like nazrul of act of Delhi)

3. Government ensuring universal insurance coverage.

ISSUES WITH INSURANCE

1. Doesnot cover outpatient coverage and cost of medicines

2. In order to make it work a detailed scheme of cost for every diagnostic need to be evolved.

3. Awareness among people regarding benefits of insurance.

4. Unholy nexus of doctors and pharma companies like over medication (ex. unnecessary hysterectomies in Chattisgarh)

However this can be most workable model. government has committed to the insurance coverage of 10 crore poor families through Ayushmann Bharat Mission.

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16. Explain the significance of the recently launched National Nutritional Strategy in the light of sliding ranking of India along the Global Hunger Index. Also, discuss with examples, the role that local self governments can play in promoting, monitoring and sustaining nutrition initiatives.(250WORDS) **15**

ग्लोबल हंगर इंडेक्स में भारत की गिरती रैंकिंग के आलोक में हाल ही में आरंभ की गई राष्ट्रीय पोषण रणनीति के महत्व की व्याख्या कीजिए। साथ ही, पोषण से संबद्ध पहलों को बढ़ावा देने, उनकी निगरानी करने और उन्हें सतत बनाए रखने में स्थानीय स्व-शासन द्वारा निभाई जा सकने वाली भूमिका पर उदाहरण सहित चर्चा कीजिए। (250 शब्द)

India's rank in Global Hunger Index has fallen from 97th in 2016 to 100th in 2017 out of 118 countries, shows the worsening hunger situation.

Several instances like recent death of 3 girls in Delhi corroborate this claim.

In the light of this NITI Aayog has launched National Nutritional strategy.

Targets → Reduce stunting by 2% per annum
Targets → Reduce anaemia by 3% per annum
Targets → Bring down IMR below 25 & MMR below 100 by 2025.

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SIGNIFICANCE

1. It will help achieve SDG target 2 of zero hunger by 2030 and fulfil constitutional obligation of social justice.
2. ~~Bring~~ shift focus from cereal centric to balanced diet
3. Improve child nutrition - NFHS 5 estimates stunting at 38%, underweight at 35% and wasting at 21%.
4. Focus on fortification of milk, rice as a potential to curb hidden hunger.
5. Improved maternal health will reduced premature births - Economic Survey 2015-16 clearly outlined significance of interventions in mother and child health.

ROLE OF LOCAL SELF GOVERNMENTS

1. Accessibility of welfare benefits to

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people.

Eg. CG government ordered that private contractors be removed from PDS, and panchayats should be involved, this increased regularity of opening of ration shops

2. Monitoring like functioning of Anganwadis, quality of mid day meal can significantly improve if local women/mothers involved.

3. Creating awareness about benefits of breastfeeding, sanitation, immunisation due to direct interface with people

4. Sustaining initiatives through involvement of people and local element.

Top down model of nutrition has failed as clearly evident from Global hunger index, it is time to try for bottom up approach.

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17. The bureaucracy in India is facing a number of serious challenges from diminishing human capital to political interference that, if left unaddressed, will lead to further institutional decline. Discuss. How can these challenges be addressed? (250 WORDS) **15**

भारत में नौकरशाही, ह्रासमान मानव पूंजी से लेकर राजनीतिक हस्तक्षेप तक कई गंभीर चुनौतियों का सामना कर रही है, जिन्हें यदि अनसुलझा छोड़ दिया गया तो आगे और अधिक संस्थागत पतन होगा। चर्चा कीजिए। इन चुनौतियों से कैसे निपटा जा सकता है? (250 शब्द)

Bureaucracy is group of unelected officials who are responsible for day to day functioning of government. Due to its immense significance in continuity of governance and political neutrality it is often termed as 'steel frame of the country'. However, this steel frame seems to be getting corrupted.

CHALLENGES IT IS FACING

1. Diminishing human capital : Hota committee pointed out diminishing quality of public servants due to several prospective bureaucrats spending there young age in preparation.

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2. Frequent transfers and posting – 2nd ARC says less than 50% posts have ~~for~~ tenure of over 1 year.
3. Political ~~of~~ Interference – people often obstruct their work giving threats of local MLAs
4. Politicisation due to expectation of favourable postings, post retirement benefits
5. Declining values of probity, integrity.
6. Domain specific skills are lacking as bureaucracy is generalist.
7. Red tapism, inertia to change
8. Excessive job security leading to complacency
9. Mai Baap attitude

If these challenges are left unaddressed, it can lead to serious decline in quality of governance.

REFORMS NEEDED

1. Reforms in examination process
– Removing optional subject to provide level playing field (Hota committee)

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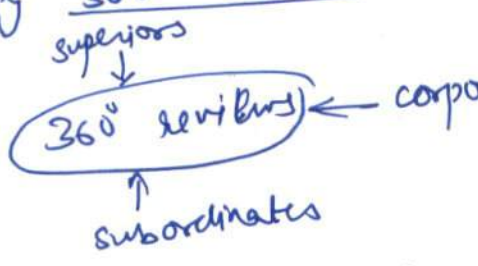
- Introducing aptitude (Surinder Nath committee)
- Reducing age of entry :- considering after school, so that timely imbibing of public service values can be done.

2. Lateral entry - where expertise is needed. Several prominent people like C. Rangarajan, Vijay Kelkar have come through this route.
3. Civil services Board - to handle promotions and transfers
4. Code of ethics for civil servants as suggested by 2nd ARC.
5. Also considering 360° review in promotions



Further there is need to change the political culture as well as culture of society such that there ~~not are~~ is not ~~inte~~ tolerance to corruption.

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18. While many people have been able to rise above poverty line, India is still home to the largest number of poor. Discuss briefly the underlying factors responsible for the prevalence of poverty in India. What are the areas in which focussed efforts need to be made in order to accelerate poverty eradication in a sustainable manner? (250 WORDS) **15**

जहाँ, कई लोग गरीबी रेखा से ऊपर आने में सफल रहे हैं, वहीं भारत में अभी भी सर्वाधिक संख्या में गरीब निवास करते हैं। भारत में गरीबी की व्यापकता के लिए उत्तरदायी अंतर्निहित कारकों पर संक्षेप में चर्चा कीजिए। गरीबी उन्मूलन की गति को संधारणीय तरीके से तीव्र करने के लिए किन क्षेत्रों में ध्यान केंद्रित किए जाने की आवश्यकता है? (250 शब्द)

As per Oxfam report, 31 % of Indians are multidimensionally poor.

Although the situation is improving fast. Recently India moved from 1st to 2nd place in list of highest number of poor people. But still it houses a large number of world's poor.

FACTORS RESPONSIBLE

1. Slow economic growth - at so called 'Hindu rate of growth' of 3-4%.
China and India were at similar level in 1980s but its poverty has now declined to almost zero level due to sustained 2 decades

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of high growth rate.

2. widespread prevalence of corruption in government of welfare schemes. In a famous statement Rajiv Gandhi said that that out of 1 Re that government sends only 15 paise reach the poor.

3. Low penetration of social security like insurance coverage, old age pension

4. Low financial inclusion till 2014 financial inclusion in rural areas was around 40%.

5. Jobless growth as India almost missed manufacturing sector whose share in GDP has stagnated at 16-17%.

AREAS WHERE FOCUS NEEDED

1. Need to sustain double digit growth
- through ease of doing business
- increasing government investment.

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2. Employment generation

- Self employment through MUDRA loans, startup India, upskilling skills.
- wage employment like MNREGA, textile, leather industries

3. Entitlements – need to shift from beneficiary to rights based and capability approach like done in Food security Act, MNREGA etc.

4. Social security like health insurance coverage being expanded through Ayushmann Bharat to 10 crore poor households.

5. Financial inclusion and digital connectivity to all households.

Poverty is a multi-dimensional concept therefore need a multi-sectoral approach. It will also help achieve SDG goal 1.

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19. In context of the need to strengthen corporate governance, the Kotak panel report has called for a major overhaul in norms for listed companies. Critically discuss the impediments to corporate governance in India and evaluate how the recommendations can help in overcoming them. (250 WORDS) **15**

कॉर्पोरेट गवर्नेंस को सुदृढ़ करने की आवश्यकता के संदर्भ में, कोटक पैनल के रिपोर्ट में सूचीबद्ध कंपनियों हेतु मानदंडों में आमूलचूल परिवर्तन का आह्वान किया गया है। भारत में कॉर्पोरेट गवर्नेंस के मार्ग में आने वाली बाधाओं पर आलोचनात्मक चर्चा कीजिए और साथ ही मूल्यांकन कीजिए कि पैनल की सिफारिशें इनसे निपटने में कैसे सहायता कर सकती हैं? (250 शब्द)

Corporate governance is a way of directing the company in a manner that protects the interests of all stakeholders including supplies, distributors, customers, employees etc.

IMPEDIMENTS IN INDIA

1. Lack of transparency - majority of firms donot report accurately due to fear of fall of shares.
2. Majority of firms are family owned and Board of directors is not empowered enough.
3. CSR norms are seen as tax on tax.

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4. Often the independent directors are not so independent and have some stake in company.

5. Till recently, there was no regulator for auditors

In order to strengthen corporate governance, Companies Act 2013 was passed to strengthen this framework.

Further recommendations of Kotak Panel are relevant :

(i) atleast 1 woman director in board.

(ii) independent regulator for auditing profession.

(iii) Post of CEO and chairman should be separate

(iv) Companies must cooperate with NGOs to ensure better outcomes

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in CSR -

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20. Several issues related to adopting new technologies, transforming processes and improving implementation of NeGP need to be addressed. Discuss. Also, enumerate the sets of principles guiding the design and implementation of the e-Kranti Program (NeGP 2.0). (250 WORDS) **15**

नई प्रौद्योगिकियों को अपनाने, प्रक्रियाओं को रूपांतरित करने और एनईजीपी (NeGP) के कार्यान्वयन में सुधार लाने से संबंधित कई मुद्दों से निपटने की आवश्यकता है। चर्चा कीजिए। साथ ही, ई-क्रांति कार्यक्रम (NeGP 2.0) के डिजाईन (रूप-रेखा) और कार्यान्वयन का मार्गदर्शन करने वाले सिद्धांतों को भी सूचीबद्ध कीजिए।

NeGP was launched to achieve the goal of a citizen friendly e-governance.

ISSUES IT IS FACING

1. Delays in completion of its mission mode project
2. Simply translation to digital space without any attempt to reengineer the government processes.
3. Attitudinal barriers from officials who are resisting change.
4. Proliferation of various online applications rather than simplication and convergence. Like several ~~every~~ ministry / department have a separate grievance redressal portal despite CPGRAMS.

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5. No systemic changes in bureaucracy — e-governance adopted as an end in itself.

In this light as a part of Digital India campaign, NeGP 2.0 or e-kranti has been launched.

Guiding principles :

1. Transformation and not just translation.
2. Business process reengineering
3. Manpower training
4. Convergence (like CCTNS linking police of all states in a network)
5. Bridging digital divide.
6. Security.

Significance

1. It can lead to faster completion of various mission mode projects especially due to monitoring through Pragati.

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2. It can simplify interface with public helping in greater engagement.

3. It gives equal significance to protection of citizen's data and other to critical government documents.

4. It will insure that government officials are well trained to adapt to change.

5. Overall, it has potential to quickly adopt and replicate best ~~performing~~ performing models

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GENERAL STUDIES (TEST CODE : 1051)

Name of Candidate	Chahat Bajpai		
Medium Eng./Hindi	English	Registration Number	22842
Center	Distance	Date	04/09/18

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
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20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are TWENTY questions printed in ENGLISH & HINDI
   इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. All questions are compulsory.
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

M-1/4, Plot No-A-12/13, 1st Floor, Ansal Building, Dr. Vidya Sagar Homoeopathic Clinic, Mukherjee Nagar, Delhi-110009

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

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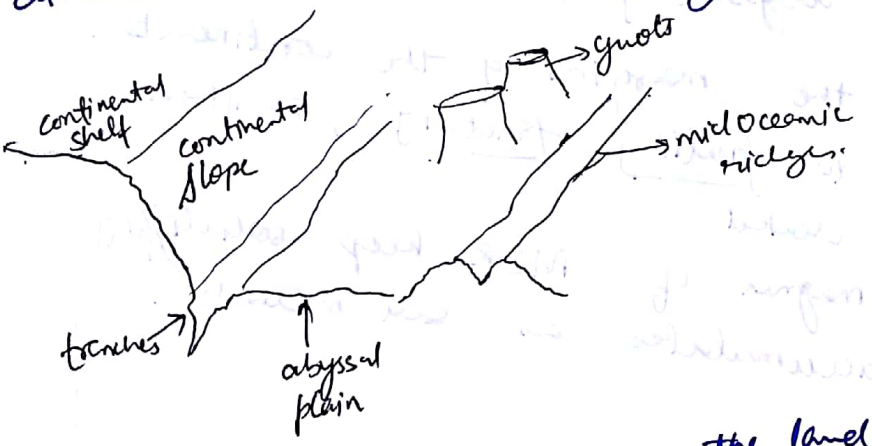
1. The mapping of ocean floor reveals complex and varied features, which rival the relief features on land. Discuss the reasons for the formation of main relief features of ocean along with their significance. **(150 words) 10**

महासागरीय अधस्तल के मानचित्रण से जटिल और विविध आकृतियों का पता चलता है, जो स्थलीय उच्चावचीय आकृतियों के तुल्य हैं। महासागरों की मुख्य उच्चावच आकृतियों के निर्माण के कारणों तथा उनके महत्व की चर्चा कीजिए।

Sea floor studies have shown that ocean floor is much more diverse than it was thought of.



Like fold mountains on the land, they are sea mounts called guyots under water. Also like the flat terrains like plains, grasslands, there are abyssal plains on the ocean floor. There are also deep valleys called trenches.

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REASONS for FORMATIONS :

1. Plate tectonics – due to divergence of ocean-ocean plates, midoceanic ridges are formed.
2. There is continuous eruption of magma from MOR – leading to formation of abyssal plains.
3. At the margins of the continents due to faulting, fracturing, trenches are created.
4. As magma of MOR keep solidifying it accumulates as sea mounts.

SIGNIFICANCE :

1. Continental shelf – has huge resources of fishery, petroleum
2. Island formation – when sea mounts rise on surface
3. Formation of new layer of ocean crust bring several minerals like poly metallic nodules on ocean floor.

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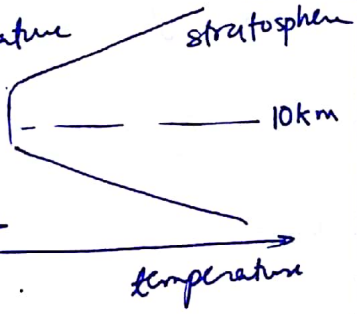
2. What is inversion of temperature? Discuss the various mechanisms of occurence of this phenomenon along with its climatic and economic significance. **(150 words) 10**

तापमान व्युत्क्रमण क्या है? इसके जलवायविक और आर्थिक महत्व के साथ इस परिघटना के घटित होने से संबंधित विभिन्न क्रियाविधियों पर चर्चा कीजिए।

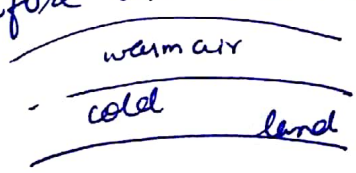
With rise of altitude, the temperature of atmosphere usually declines (at around 6.5°C/km). ~~How~~ As heating occurs primarily due to long wave length radiations from earth. However at times this trend is violated and temperature start rising. This is called temperature inversion.

MECHANISMS

1. At tropopause: temperature is constant to slight increasing. This is due to presence of ozone which leads to heating.



2. On a cold winter night. – land cools and therefore air near it cools



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3. Valley inversion.
At night the cold air from hill top descends to valley

IMPLICATIONS

Climatic – descent of cold air creates ~~any~~ anti-cyclonic, high pressure or stable condition. This prevents rain

Economic : coming of cold air down the valley slope can create frost and damage the crops.

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3. With rapid industrialization, the threat of industrial disasters has increased. Explain the meaning of industrial disaster with adequate examples. Also, highlight the legal and institutional framework to reduce the risk during such events. **(150 words) 10**

तीव्र औद्योगीकरण के साथ, औद्योगिक आपदाओं का खतरा बढ़ गया है। यथोचित उदाहरण देते हुए औद्योगिक आपदा के अर्थ की व्याख्या कीजिए। साथ ही, ऐसी घटनाओं के दौरान जोखिम को कम करने के लिए कानूनी और संस्थागत ढांचे पर भी प्रकाश डालिए।

Industrial disaster is a man-made disaster that occurs due to any of following events —

1. Leakage of harmful gases like methane isocynaide in Bhopal gas tragedy 1984
2. Leakage of radioactive substance like in Chernobyl and Fukushima
3. Health hazards to workers like silicosis in mining industry
4. Leakage of chemicals like oil spills on ennore port in 2017

These are termed as disasters due to their harmful long term consequences.

1. Environment – chemicals settle in air, water, land and remain undecomposed for long term.

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2. Society - usually is unprepared how to respond to crises.

3 Health hazards - like genetic defects in case of nuclear disasters

LEGAL - INSTITUTIONAL MEASURES

1. Factories Act 1948, Environment protection act 1986 provide necessary guidelines.

2. NDRF has a special battalion to deal with chemical, nuclear disasters

3. DPSP also mandate the government to provide safe environment However at times they are neglected by the factory owners to save cost. Therefore there is need for regular inspections, regulations inorder to achieve sustainable development goals

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4. What are 'dead zones'? Mention the reasons for their formation. Explain, in brief, the impact of such dead zones. (150 words) 10

'मृत क्षेत्र' (डेड जोन) क्या हैं? इनके निर्माण के कारणों का उल्लेख कीजिए। ऐसे मृत क्षेत्रों के प्रभाव की संक्षेप में व्याख्या कीजिए।

'Dead zones' are the regions in the ocean that are no longer capable to support animal and plant- diversity. Last year, a NASA report revealed formation of a major dead zone in Bay of Bengal.

REASONS for FORMATION

1. Eutrophication or nutrient enrichment due to flow of agricultural fertilizers, industrial chemicals, untreated MSW into the oceans.

2. Oilspills like on Ennore port in 2017 can create conditions where sunlight is not able to reach ocean surface and oxygen level also reduces

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3. Illegal, unregulated and unreported fishing at unsustainable levels like using deep sea trawling.
4. Climate change, increased UV penetration due to ozone hole.

IMPACT OF DEAD ZONES :

1. Decline of biodiversity – phytoplankton population cannot survive which form basis of food chain.
2. Coral bleaching – ecological implication
3. Economic impact – decline in fish catch.
4. Impact on tourism like cruise tourism.

Overall it raises question on nature of development and thus legitimacy of governance policies, as it compromises interest of future generation.

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5. Stating the differences between deltas and alluvial fans, highlight the factors responsible for their formation. Also, briefly bring out the economic importance of these two depositional landform types. **(150 words) 10**

डेल्टा और जलोढ़ पंख के मध्य अंतर बताते हुए, उनके निर्माण के लिए उत्तरदायी कारकों पर प्रकाश डालिए। साथ ही, इन दो निक्षेपात्मक भू-आकृतिक प्रकारों के आर्थिक महत्व को भी संक्षेप में बताइए।

Deltas and alluvial fans are ~~the~~ both depositional features however they differ significantly.

Deltas	Alluvial fans.
. Formed at junction of river with ocean	. Formed at foot of mountains as of river enter into hills.
. Flow of river is slow – there is clear segmentation of particles – coarser ones deposit first	. Flow of river is fast – segmentation of particles not there.
. mostly very fertile due to fine sediment	. coarse pebbles – rivers disappear

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factors for formation

Delta – At the end of course river carry huge sediments, and its speed is slowed due to flat terrain.

Alluvial fans – as river emerges from mountainous terrain, it contains sediments which deposit at foothills.

Economic importance

Delta
- very fertile, agricultural land.
- support huge population, biodiversity
- fishing.

Alluvial fans
- Bring deposits which lead to rejuvenation of soil through formation of new layer
- soil basis of farming
- placer deposits have minerals like gold, silver, Ni etc.

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6. What do you understand by Inter Tropical Convergence Zone (ITCZ)? Discuss the annual fluctuations and shifting of ITCZ belt and its significance for India. **(150 words) 10**

अंतः उष्ण कटिबंधीय अभिसरण क्षेत्र (ITCZ) से आप क्या समझते हैं? ITCZ पेटी के वार्षिक परिवर्तन और स्थानांतरण एवं भारत के लिए इसके महत्व पर चर्चा कीजिए।

ITCZ is a zone of low pressure area around equatorial region. It is formed due to excessive heating of this region due to solar insolation thus creating low pressure condition.

ANNUAL FLUCTUATIONS

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During month of July when sun apparently moves in Northern Hemisphere, ITCZ shifts upwards while in January when sun moves into southern hemisphere it moves downwards.

This happens because —

heating due to solar radiation → warm air rises → low pressure condition

Significance for India

1. Movement of ITCZ into India during July attracts monsoon winds. Blowing from ocean to land they carry huge moisture and bring rain.

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7. What is weathering? Discuss the ecological and economic significance of the process. (150 words) 10

अपक्षय क्या है? इस प्रक्रिया के पारिस्थितिकीय और आर्थिक महत्व पर चर्चा कीजिए।

Weathering is a process of disintegration of large rocks in smaller fine grained particles.

Mechanism of weathering
- mechanical agents of wind, water, temperature changes.
- chemical through carbonation, oxidation
- Biological through furrowing

Ecological significance :

1. It leads to formation of regolith which forms the basis of soil.
2. It provides substratum to support wide range of microscopic as well as large flora and fauna.

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Economic significance

1. It leads to concentration of minerals leading to formation of ores.
2. It rejuvenates soil thus increasing potential of farming.

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8. Explain the concept of Sun-spot cycle. In view of the approaching Solar minimum, highlight the changes that it brings on sun's surface and the effects that it has on earth. (150 words) 10

सौर कलंक चक्र की अवधारणा की व्याख्या कीजिए। आसन्न सोलर मिनिमम के परिप्रेक्ष्य में, सूर्य की सतह पर उत्पन्न होने वाले परिवर्तनों और इसके द्वारा पृथ्वी पर पड़ने वाले प्रभावों पर प्रकाश डालिए।

Sun spots are the location on the sun surface which are much cooler than surrounding area. They are formed as the solar insolation keeps changing.

Changes on sun's surface

Temperature of sun's corona is much higher than inner layers. However formation of sun spot reduces temperature by upto 1000's of degree celsius.

The reasons for its formation are not clearly known. However several studies like Aditya L1 of ISRO have been launched to study it.

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Effect on earth :

change in insolation ~~of~~ is a major ~~s~~ reason behind changes in climate patterns.

- Ice ages ocurred during solar minimum.
- prolonged sun spots can help naturally revert present climate change event.

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9. What is Pacific Ocean Garbage Patch? Provide an account for the factors responsible for its development and location. Also, discuss its impacts and suggest measures for mitigation. (150 words) 10

पैसिफिक ओशन गार्बेज पैच क्या है? इसके विकास एवं अवस्थिति के लिए उत्तरदायी कारकों का विवरण प्रस्तुत कीजिए। साथ ही, इसके प्रभावों पर चर्चा कीजिए और शमन के उपाय भी सुझाइए।

Pacific ocean garbage patch is a term that is referred to increasing solid waste especially plastic, metal cans in the pacific ocean. They are found upto as deep locations as Mariana trench.

Factors responsible

1. Increased use of plastics which are non-biodegradable
2. Unscientific waste disposal
3. Oil spills
4. flow of rivers into oceans - which carry all untreated waste.

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IMPACT

On biodiversity – threatened, a study found plastic accumulates in fish

On humans – consumption of seafood can become unsafe.

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10. Explain the formation of mid-oceanic ridges in different oceanic basins of the world. **(150 words) 10**

विश्व के विभिन्न महासागरीय नितलों में मध्य महासागरीय कटकों के निर्माण की व्याख्या कीजिए।

Mid oceanic ridges are formed at the junction of diverging ocean - ocean plates.

Location :

MOR extends mainly in the middle of Atlantic ocean - as it lies at junction of North american and South American plates on one side and Eurasian

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and African plates on the other.

In Pacific ocean they are formed due to presence of numerous minor plates on earth crust like Cocos, Juan De Fuca etc.

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11. Discuss the spatial and temporal variation of rainfall in India. Has this pattern been changing in recent years? Examine. **(250 words) 15**

भारत में वर्षा की स्थानिक और कालिक भिन्नता पर चर्चा कीजिए। क्या हाल के वर्षों में यह पैटर्न परिवर्तित होता रहा है? परीक्षण कीजिए।

India has monsoon type of climate with almost 80% rain confined in 3-4 months.

SPATIAL VARIATION

1. Eastern part of country receive higher rain than western part.
2. Based on relief and topography – windward side of western ghats, northeast recieve higher rainfall.
3. Based on continentality – Ladakh region, central India – Vidarbhar (MH)

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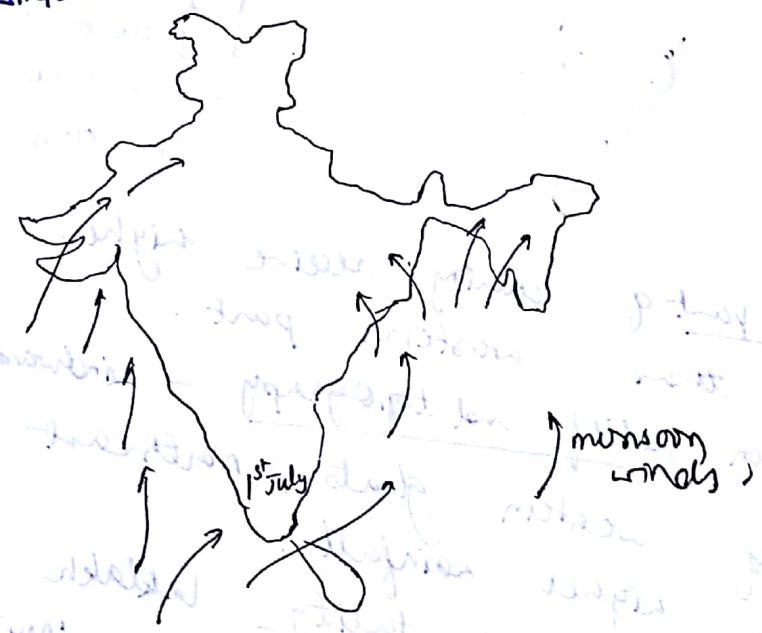
Bundelkhand lesser rainfall.

TEMPORAL VARIATION

1. Most parts of the country receive rainfall in monsoon season from July to October.
2. Tamil Nadu coast receive rainfall due to northeast monsoon in early winter in November.
3. Northwestern parts also receive rain from western disturbance in winters.



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Thus rain proceeds from coast to interior with time.
Overall average rainfall = 125cm

CHANGING PATTERN

In recent years the pattern has been witnessing changes like increased frequency of extreme weather events like Chennai floods 2015, now Kerala floods etc.

Reasons

Natural
- El Nino events
- shifting pressure belts
- changing insolation

Anthropogenic
- climate change
- increasing GHGs - melting of glaciers
- overutilisation / mismanagement of resources.

Implications: more regions witnessing droughts, floods etc. leading to agrarian distress.

India with 49% population involved in agriculture is heavily reliant on monsoon. Therefore, there is need to minimise ecological footprint of human action.

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12. Technology has provided important tools for making disaster management more effective. Elaborate with special focus on the role of technology in reducing disaster risk. Also highlight the challenges in application of technological solutions in disaster affected areas. (250 words) 15

आपदा प्रबंधन को अधिक प्रभावी बनाने हेतु प्रौद्योगिकी ने महत्वपूर्ण साधन प्रदान किए हैं। आपदा जोखिम न्यूनीकरण में प्रौद्योगिकी की भूमिका पर विशेष ध्यान केंद्रित करते हुए सविस्तार वर्णन कीजिए। साथ ही, आपदा प्रभावित क्षेत्रों में तकनीकी समाधानों के अनुप्रयोग में आने वाली चुनौतियों पर भी प्रकाश डालिए।

Disaster management is a process of building community preparedness, doing hazard and vulnerability mapping to minimise risk of hazard. At the same time, setting up institutional mechanism to respond, recover and rehabilitate from disasters.

Technology has potential to make each of these processes more effective.

ROLE OF TECHNOLOGY :

PRE DISASTER

Preparedness

1. Hazard and vulnerability mapping - more precisely through use of big data analytics.

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2. Early warning system – like INCOIS has set up high frequency radars, coastal surveillance system to detect Tsunami in 10 minutes.

3. Tracking exact nature of hazard – can significantly reduce damage like through satellite imagery we were able to track 2013 cyclone Phailin on coast of Odisha very precisely to avoid repeat of 1999 super cyclone.

DURING DISASTER

1. Information dissemination – like about precautionary measures, safe places, risk of epidemics (after floods) etc using mobile applications.

2. To mark oneself safe – to inform near and dear one's – a feature social media introduced after 2015 Nepal earthquake.

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3. To coordinate NGOs, local bodies etc in aids supply chain management

POST DISASTER

in recovery, rehabilitation and reconstruction.

1. Studying impact of disaster through drones, including the lessons learnt in future planning.

CHALLENGES

1. Breakdown of electricity, internet connection during disasters - but they can be made robust through underground cables.
2. Most vulnerable like poor, old, women usually have least access to technological solutions.
3. High cost and also need for training to use them.

Overall digital solutions are only 'additional benefit', ground level preparation through mock drills, trained forces and other structural and non structural solutions needs to be done.

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13. While overcrowding in public places cannot be wished away in India, what we need are better infrastructure and more effective crowd-control measures. Comment. Also, briefly enumerate NDMA guidelines for crowd management. **(250 words) 15**

यद्यपि भारत में सार्वजनिक स्थलों पर अत्यधिक भीड़भाड़ को कम नहीं किया जा सकता है, तथापि हमें बेहतर अवसंरचना और अधिक प्रभावी भीड़-नियंत्रण उपायों की आवश्यकता है। टिप्पणी कीजिए। साथ ही, भीड़ प्रबंधन के लिए NDMA के दिशानिर्देशों को संक्षेप में सूचीबद्ध कीजिए।

Kumbh festivals occuring once in 12 years see footfalls of crores of people every day. Infact many other socio-religious ceremonies witness huge crowds.

Lack of effective crowdmanagement can lead to accidents (like death of almost 200 people in fireworks in a Kerala festival in 2016), thefts etc.

NEED FOR BETTER INFRASTRUCTURE

1. To be able to cater to needs of large number of people
2. Having facilities like first-aid, fire prevention, drinking water, toilets, lost and found centre etc.

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EFFECTIVE CROWD CONTROL MEASURES

1. At places where robust infrastructure doesnot exist, it can be temporarily erected as per the needs of the event if adequate crowd planning is done.
2. With growing population, overcrowding is bound to increase therefore district administration needs to be prepared.
3. To minimise loss of human lives by providing safe avenues of religious-cultural tourism.
4. To protect vulnerable people like old, children.

In this regard NDMA guidelines for crowd management is very significant.

NDMA GUIDELINES

1. Need to prepare a map of the region before hand.

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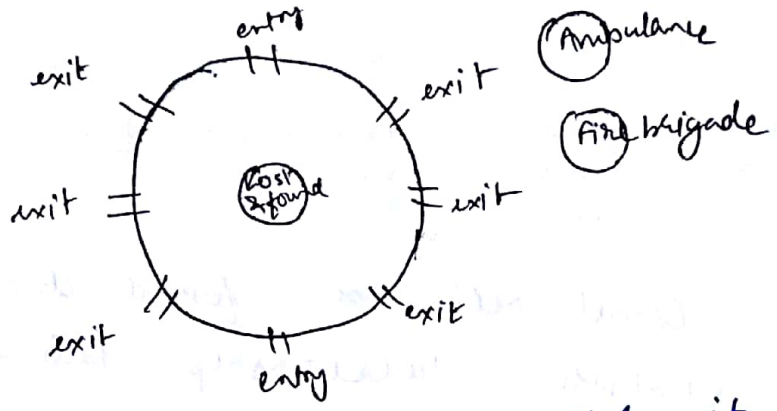

- few entry points and multiple exits
- streamlining crowd using barricades, railings.
- CCTV cameras to detect any theft.
- Ambulance, fire services in waiting.

2. Awareness education to visitors of how to respond in event of crises like move in direction of crowd, protect chest using hands etc.

Any event if preplanned can be conducted smoothly. India already has experience of holding Kumbh festivals which are world's largest events and this can be emulated.

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14. State the conditions that are conducive for the formation of coral reefs. Mention the anthropogenic factors that have resulted in their decline. Also highlight its consequences. **(250 words) 15**

प्रवाल भित्तियों के विकास के लिए अनुकूल दशाएँ बताइए। उन मानवीय क्रियाकलापों का उल्लेख कीजिए जिनके परिणामस्वरूप प्रवाल भित्तियों का ह्रास हुआ है। साथ ही, इसके परिणामों पर भी प्रकाश डालिए।

Coral reefs are formed due to symbiotic relationship between ~~mil~~ small reef producing organism called coral polyps and algae called zooxanthalae which provides food and nourishment.

REEF BUILDING – Corals build skeletal shells using calcium carbonate. Once the organism dies the shells are colonised by other corals ~~thus~~ In this manner huge fringing barrier ~~of~~ or attol reefs are made.

CONDUCIVE CONDITIONS –

1. Temperature : narrow range of 25-27°c
2. Salinity : 33 ppt
3. No turbulence : like not at mouth of river, or regions with upwelling, downwelling.

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As a result reef building corals occur mostly upto tropics.

ANTHROPOGENIC FACTORS LEADING TO DECLINE

Most of the world's corals are facing the threat of bleaching. World's biggest great barrier reef of the coast of North eastern Australia is greatly threatened, due to reason:

1. Rising global temperature due to global warming.
2. Incoming of UV rays due to depleting

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ozone layer.

3. Nutrient enrichment / Eutrophication due to disposal of municipal, agricultural waste in rivers (and river flowing into ocean)

4. Acid rains due to increased SO_2, NO_2 concentrations (due to automobile exhaust, industrial fumes)

5. Mining, port development

6. Oil spills - which restrict penetration of solar radiation, oxygen

CONSEQUENCES

Coral reefs which are of called 'rainforest of the ocean' due to huge CO_2 sequestration capacity are threatened due to bleaching in which the algae leave the coral polyps leading to whitening.

This can damage not only ocean ecosystem but threatens entire ecological balance. Therefore sustainable development towards SDG 14 protecting ~~water~~ life below water is essential.

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15. In combining the sea floor spreading theory with continental drift and information on global seismicity, the theory of Plate Tectonics provides a coherent explanation for crustal movements. Discuss. **(250 words) 15**

महाद्वीपीय विस्थापन सिद्धांत और वैश्विक भूकंपीयता के बारे में सूचना के साथ सागर अधस्तल विस्तार सिद्धांत को संयोजित करने से, प्लेट विवर्तनिकी सिद्धांत भूपर्पटी संचलन की एक सुसंगत व्याख्या प्रदान करता है। चर्चा कीजिए।

Plate tectonics is the most advanced, well-accepted theory to explain the geological formations of the earth.

EMERGENCE OF PLATE TECTONIC THEORY

Theory emerge by combining the existing continental drift theory of Alfred Wagner with the data of sea floor spreading and paleo magnetic studies.

Continental drift theory provided that entire earth was divided into Panagea (continent) and Panathalass (mega ocean) and the smaller continents broke down from this super continent. It was based on evidences like zig saw fit of continental margins,

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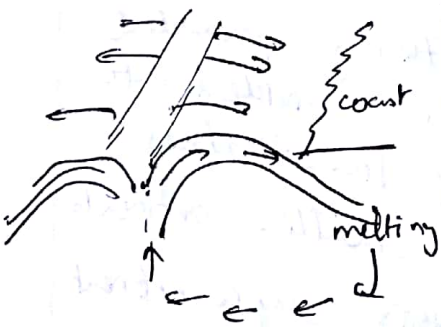
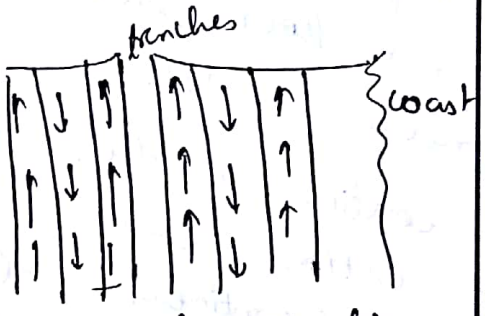
~~Age~~ age of minerals, rocks etc.
However it could not explain –
– location of volcanoes, earthquakes
– forces behind movement of continents and breaking from pangea.

After sea floor spreading, it became clear the ocean floor is not uniform but consists several structures like –



Convectional cells



paleomagnetic data

Based on these ~~con~~ plate tectonic theory evolved, which provided that earth is made up of 7 major and

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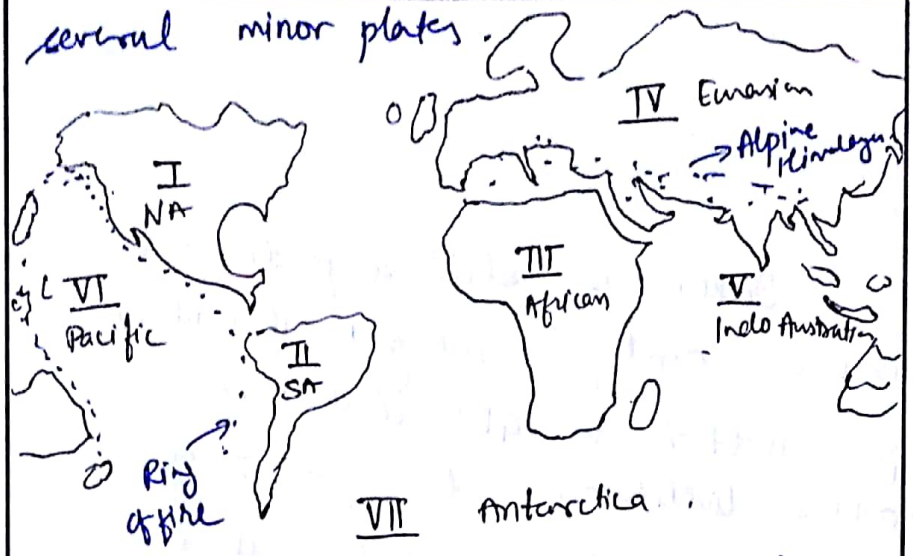
several minor plates.



It is able to explain seismicity, existence of volcanoes.
like – earthquakes in ring of fire (68%) and alpine Himalayan belt (15%) of total as these regions are located at plate boundaries.
Also volcanism at mid oceanic ridges is reason for younger oceanic crust while old crust at continents.
Overall it is the plates, floating on a semisolid asthenosphere that move.

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16. Provide an appraisal of the vulnerability of the agriculture sector to natural disasters. What can be done to strengthen the resilience of the sector in order to reduce the impact of such disasters? **(250 words) 15**

प्राकृतिक आपदाओं के प्रति कृषि क्षेत्र की सुभेद्यता का आकलन कीजिए। ऐसी आपदाओं के प्रभाव को कम करने के लिए इस क्षेत्र की अनुकूलन क्षमता को सुदृढ़ करने हेतु क्या किया जा सकता है?

India is still a predominantly agrarian country. Thought it contributes only 16-17 % to GDP but it provides livelihood to 49 % of country's population. Therefore it is essential to do an appraisal of this sector to natural disasters.

Vulnerability

1. Only around 45% of total cultivated area in India is irrigated, this makes it very vulnerable to droughts, floods alike.

2. With climate change instance of extreme weather events are bound to increase. Economic survey 2017-18 pointed out it can lead to decline of productivity in

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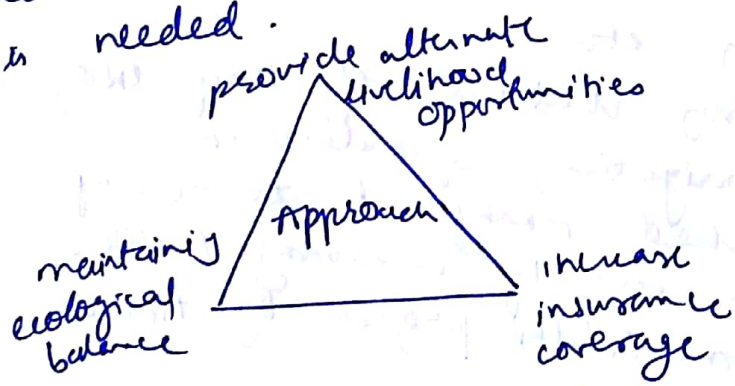
unirrigated areas by 15-20%.

3. Most farmers (almost 85%) are small and marginal increasing their vulnerability.

4. New emerging hazards like
- rising salt salinity due to faulty agrarian practises
- desertification

To strengthen resilience of the sector a multisectoral approach is needed.



1. Alternate livelihood opportunities - like fishing, dairy farming, apiculture (honey exports from India rising sharply) agro forestry.

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2. Insurance coverage – PMFBY provides insurance at uniform premium of 1.5/2/5%. It needs to be further strengthened by increasing coverage to 100% and faster claims settlement

3. Maintaining ecological balance –
- like climate smart agriculture – choosing less water intensive crops in dry regions.
- organic farming
- practises like mulching, crop rotation etc
- increasing water use efficiency through drip irrigation, sprinklers etc.
- water shed management to revamp ecosystem severely damaged like Ralegaon Siddhi project by Anna Hazare.

But for all this to succeed, capacity building of young generation of farmers and increase awareness among them is essential.

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17. Explain what a drought is and describe its different types. Discussing the environmental and societal impacts of droughts, enumerate the factors that aggravate these. **(250 words) 15**

व्याख्या कीजिए कि सूखा क्या है तथा इसके विभिन्न प्रकारों का वर्णन कीजिए। सूखे के पर्यावरणीय और सामाजिक प्रभावों पर चर्चा करते हुए, इनकी गंभीरता को बढ़ाने वाले कारकों को सूचीबद्ध कीजिए।

Drought is a situation of scarcity of water for agricultural, livestock, even for drinking purposes.

TYPES :

1. Meterological – due to inadequate rainfall
2. Agricultural – due to faulty agricultural practises such that land is unable to water intensive crops.
3. Ecological – when productivity of entire ecosystem is threatened.

IMPACTS

Societal :

1. ~~Triat~~ Trikal (3-fold scarcity) – of food (akal), trinkal (fodder) and water.

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2. Women, old are most affected who have to travel long distances to fetch water

3. Agrarian distress as 45% of our total cultivated land area is unirrigated leading to farmer's suicides like in Latur.

4. Death of cattle due to lack of fodder.

5. Spread of epidemics due to consumption of polluted water.

Environmental impact:

1. Lack of moisture in soil can increase chance of soil erosion

2. possibility of desertification increase

3. chances of forest fires increases which can further lead to greater Green house gas emissions.

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FACTORS leading to droughts:

1. Natural
- El Nino situation
- spatial, temporal variation of monsoon.
- Hard rock structure which make it difficult to recharge aquifers

2. Anthropogenic
- misutilisation of ground water due to practises like flood irrigation.
- pollution of water by release of industrial effluents, muncipal solid wastes etc.. which degrade quality of water for ~~con~~ usage.
- inadequate storage like in northeast

Solutions
1. climate smart agriculture, alternate livelihood opportunities to build resilience, drip irrigation, sprinkler
2. roof-top rain water harvesting, building small check dams.

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18. Assess the vulnerability of Indian coastal regions to cyclones. Also, mention the objectives and approach adopted by the National Cyclone Risk Mitigation Program (NCRMP) in this regard. **(250 words) 15**

चक्रवातों के प्रति भारतीय तटीय क्षेत्रों की सुभेद्यता का आकलन कीजिए। साथ ही, इस संबंध में राष्ट्रीय चक्रवात जोखिम शमन कार्यक्रम (NCRMP) द्वारा अपनाए गए उद्देश्यों और दृष्टिकोण का भी उल्लेख कीजिए।

India is vulnerable to almost 10% of world's total cyclones. However in terms of severity 21 out of 23 most disasterous cyclones impacted India.

vulnerable regions cyclone

According to 2nd ARC, 8% of country's total land area and 40% of total population of coastal states is vulnerable to cyclones.

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Eastern states are more vulnerable due to the fact that tropical cyclones travel from east to west.

Post summer, during August-September when sea surface temperature is high, the conditions are suitable for formation of tropical cyclones.

Due to high rates of poverty, especially in Odisha, Andhra Pradesh vulnerability and chances of damage is multifolded.

In this regard National Cyclone Risk Mitigation Program is being implemented by INCOIS.

Objectives :

1. Understanding disaster risk - through mapping, vulnerability analysis.
2. Capacity building, institutional support - for preparedness, minimise damage.

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3. funding infrastructure needs
4. Minimise damage to life and property through quick response, recovery post disaster.

Approach adopted

1. Infrastructure building - like underground electricity, telephone cables.
   - cyclone shelters with relief material for atleast 1 week.
2. Capacity building - through mock drills, army exercises in rescue and relief.
3. funding innovative ideas and replicating in other states.
4. Technological solutions - surveying through aerial ways in addition to satellite mapping.

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19. What role have volcanoes played in formation of earth's atmosphere in the past? Elaborate on the impact of volcanic activity on climate change in contemporary times. **(250 words) 15**

अतीत में पृथ्वी के वायुमंडल के निर्माण में ज्वालामुखियों ने क्या भूमिका निभायी है? समकालीन समय में जलवायु परिवर्तन पर ज्वालामुखीय गतिविधियों के प्रभाव का सविस्तार वर्णन कीजिए।

Volcanoes are the vents in the earth surface through which molten magma called lava, gases like SO_2, CO_2, dust particles etc are ejected from time to time.

ROLE IN EARTH'S ATMOSPHERE FORMATION

Early atmosphere of earth consisted of primarily H, He, CO_2 etc. Due to repetitive volcanism other gases like N, CO_2 SO_2 came up and the constituents got modified. This process is called degassing.

Presence of SO_2 lead to cooling of atmosphere further leading to condensation of water vapour.

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This lead to formation of oceans.

When oceans formed, CO_2 got dissolved in it leading to further drop of temperature. Finally when living cells came up oxygen came into atmosphere.

Thus volcanism (along with others like meteor strikes) is important event in formation of earth atmosphere in present structure.

IMPACT ON CLIMATE CHANGE

Release of SO_2 in the atmosphere cools the atmosphere by upto few degree celsius. This gives hope to revert the global warming through.

1. Creating artificial volcanoes to eject SO_2, dust, aerosols.

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The However its feasibility is still under research.

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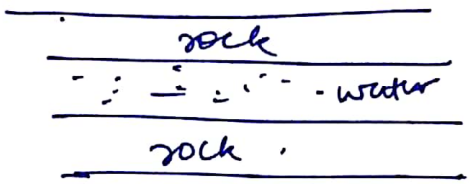
20. A need has been felt to demarcate aquifer systems in the country so as to provide critical information to plan for their sustainability. Analyse. Also, mention the steps taken by the Government of India in this regard.

(250 words) 15

देश में जलभृत (एक्विफर) प्रणालियों को सीमांकित करने की आवश्यकता का अनुभव किया जा रहा है, ताकि उनकी संधारणीयता संबंधी योजना बनाने हेतु महत्वपूर्ण सूचना प्रदान की जा सके। विश्लेषण कीजिए। साथ ही, इस संबंध में भारत सरकार द्वारा उठाए गए कदमों का भी उल्लेख कीजिए।

Acquifers are the underground reserves of water trapped within the layers of rocks.



Need to demarcate:

1. For sustainable usage: usage of acquifers is increasing due to agricultural, industrial needs. leading to their depletion

2. Once depleted – they are very difficult to recharge due

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to presence of hard rocks.
like regions of Vidarbha, Rayalseema are facing.

Therefore, conservation of acquifers to tide over difficult drought conditions is necessary.
Also these conservation will increase overall ecological productivity.

STEPS TAKEN:

1. Central Ground Water Commission along with ISRO has begun task of acquifer mapping.
2. Promotion of watershed development, rain water harvesting.
3. Artificial acquifer recharging technique

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GENERAL STUDIES (TEST CODE : 1060)

Name of Candidate	Chahat Bajpai		
Medium Eng./Hindi	English	Registration Number	22842
Center	Online	Date	10/08/18

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
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Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in ENGLISH & HINDI
   इसमें **बीस** प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. All questions are compulsory.
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

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1. Discuss the prospects & challenges in adopting an integrated multimodal transportation system in India with reference to government initiatives in this regard. **(150 words) 10**

भारत में एकीकृत मल्टीमॉडल परिवहन प्रणाली के संबंध में सरकार की पहलों को संदर्भित करते हुए इसे अपनाने से संबंधित संभावनाओं एवं चुनौतियों पर चर्चा कीजिए।

Presently the logistics cost in India are one of the highest globally (18% compared to 8% in China, UK). This reduce competitiveness for our exports. On this regard, integrated multi-modal transport system is proposed.

Key features
- world class packaging, handling facilities
- single clearance, payment system
- unified platform giving information about all possible fleet

Prospects:

1. Bring down logistics cost - make exports more competitive
2. Create employment in the supply chain.

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3. Provide better multimodal mix (presently Roads – 65 %, railways – 33 %, waterways – 2 %)
while cost of waterways is least and roadways is highest.

4. Provide better capacity utilisation of available fleet

Challenges

1. Roadways, railways, waterways are governed by separate ministries in silos

2. Huge financial investment needed for upgradation – of almost $ 4.5 trillion by 2030 (Eco survey 17-18)

3. Old fleet

4. Specific problems to waterways like silting, cross subsidisation in railway.

As suggested by Rakesh Mohan committee as a first step a unified transportation ministry needs to be a created.

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2. Contract farming can help in the expansion of organized food processing industry in India by strengthening backward linkages. Comment. What changes are required in the existing regulatory structure to address issues related to contract farming in India? **(150 words) 10**

अनुबंध कृषि (कॉन्ट्रैक्ट फार्मिंग) बैकवर्ड लिंकेज को सुदृढ़ कर भारत में संगठित खाद्य प्रसंस्करण उद्योग के विस्तार में सहायता कर सकती है। टिप्पणी कीजिए। भारत में अनुबंध कृषि से संबंधित समस्याओं को हल करने हेतु वर्तमान नियामक संरचना में क्या परिवर्तन आवश्यक हैं?

Food processing in India accounts for 20% of agricultural GDP and provides 17 lakh jobs. However, as estimates show this is much below its potential.

SIGNIFICANCE OF CONTRACT FARMING FOR THIS :

1. Through contract farming, the private players will enter into a contract with the ~~pro~~ farmers to produce what they will require ~~pro~~ for processing, thus assured raw materials.

2. Bring greater investment from private sector which is yet to pick despite 100% FDI

3. Upgrade storage, warehousing, cold

Don't write anything this margin (इस भाग में कुछ ना लिखें)

storage chains which have remained underdeveloped due to reservation for SMEs.

Changes needed

1. Legislation : presently there is no legislative framework. Model contract farming ~~act~~ bill needs to be adopted.

2. Necessary so that prices not dictated on farmers, & under no case land of farmer is forfeited.

3. Amendments needed to APMC to give marketing freedom.

4. Amendment needed to Essential commodities act to allow storage of greater quantities of raw materials.

5. Institutional arrangement for grievance redressal

Don't write anything this margin (इस भाग में कुछ ना लिखें)

3. In view of the direct link between tenure security and food security, there is need for a conducive legal framework for land rights in India. Discuss.

(150 words) 10

पट्टे की सुरक्षा और खाद्य सुरक्षा के बीच प्रत्यक्ष संबंध को ध्यान में रखते हुए, भारत में भूमि अधिकारों के लिए एक हितकर कानूनी ढांचे की आवश्यकता है। चर्चा कीजिए।

In India, 85% farmers are small and marginal with average ~~large~~ land holding of ~~1.5 acre~~ less than 1 ~~hecta~~ acre. Additionally many are farm labour.

With increasing rural-urban migration and disenchantment of youth to agriculture, there is growing threat to food security scenario.

In this regard, there are need for tenancy reforms.

Presently tenancy laws are very stringent and allow transfer of land ~~aft~~ to tenant after a fixed ~~pix~~ period.

This acts as a deterrent and people prefer to keep land uncultivated

Don't write anything this margin (इस भाग में कुछ ना लिखें)

rather than leasing it

Therefore there is ~~need~~ need for conducive legal framework which promote land leasing.

In this regard model land leasing Act of Niti aayog holds immense significance - It provides -

1. Security of tenure to tenant.
2. Land rights of owners to be protected
3. Tenancy based on a prior agreement violation of which can lead to cancellation of rights.
4. Allow tenant to access formal credit ~~that~~ by virtue of being cultivators.

Thus the states need to adopt such a legal framework.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. The ultimate goal of farm loan waivers is to lessen the debt burden of distressed and vulnerable farmers and help them qualify for fresh loans. However, this practise suffers from several drawbacks. Discuss.

(150 words) 10

कृषि ऋण माफ़ी का अंतिम लक्ष्य संकटग्रस्त और सुभेद्य किसानों का ऋण बोझ कम करना और उन्हें नए ऋणों के लिए अर्ह बनाने में सहायता प्रदान करना है। हालांकि, यह चलन कई कमियों से ग्रस्त है। चर्चा कीजिए।

Farm loans waivers are announced by government due to rising number of farmers suicides (almost 15,000 every year) mainly due to indebtness.

Drawbacks
1. Huge fiscal cost – 2-3% of GDP (ecosurvey)
2. Domino effect
3. Doesnot necessarily benefit poor farmers whose reliance on informal sources is high
4. Mostly used in short term family expense – no long term investment.

~~Dot~~ Moreover it affects the overall credit culture among farmers, and leads to moral hazard that is even those who can pay donot pay.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

Thus any waiver should be announced only after ~~ge~~ careful study at ground of its impact. ~~Path~~ Also, long term measures like marketing reforms, value addition are needed to reduce farm distress

Don't write anything this margin (इस भाग में कुछ ना लिखें)

5. Minimum Support Price (MSP) of crops is a short term solution for agricultural distress which creates long term problems. Examine. Suggest measures to overcome the the limitations of the MSP regime.

(150 words) 10

फसलों के लिए न्यूनतम समर्थन मूल्य (MSP) कृषि संकट का एक अल्पकालिक समाधान है जो दीर्घकालीन समस्याएं पैदा करता है। परीक्षण कीजिए। MSP व्यवस्था की कमियों से निजात पाने हेतु उपाय सुझाइए।

Minimum Support Price of crops is announced by government every year for 23 crops based on CACP recommendation.

It is a short term solution as it removes ~~and~~ risk of market failure.

However several long term costs –

1. Cereal centric growth – as procurement done only for cereals.
2. Protein inflation, huge import bill for oilseeds and pulses
3. Regional disparity as 6 7 % procurement done in 5 states.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. Equity - Shanta Kumar Committee pointed out only 5% of small/marginal farmers benefit from MSP.
5. leads to rottening of food grains
6. Repurcussions at WTO

Measures to reform

As suggested recently by a government appointed committee, price deficiency payment based on crop quality can be give like Bhavantar Bhugtan yojana of M.P.

or alternatively, a fixed payment can be made to farmers like in US and China.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

6. With women playing an increasingly significant role in the Indian agriculture sector, gender specific interventions can be the key to improving agricultural productivity. Discuss. **(150 words) 10**

भारतीय कृषि क्षेत्रक में महिलाओं की बढ़ती भूमिका को ध्यान में रखते हुए, कृषि उत्पादकता में सुधार लाने के लिए लिंग विशिष्ट हस्तक्षेप महत्वपूर्ण हो सकते हैं। चर्चा कीजिए।

With growing urbanisation, triggering migration of male members of the family, there is growing trend of feminisation of agriculture.

Today women account for almost 80% of farm labourers and 50% of cultivators.

Various issues faced by women in agriculture

1. lack of land ownership restricts access to credit
2. Lack of technical know-how
3. Low awareness about various schemes like PMFBY, soil health cards etc
4. low capability/experience in marketing.

As a result, the agricultural productivity suffers and rural households are not able to get best price for their produce.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

Gender specific Interventions

1. Training / capacity building + increasing awareness of schemes

2. Provide voice / platform for collective bargaining through Mahila Kisan Shakti Sangathan

3. Providing access ~~th~~ to credit through SHG - bank linkage
- also as NITI aayog proposed credit as producer of crops and not as owner of land.

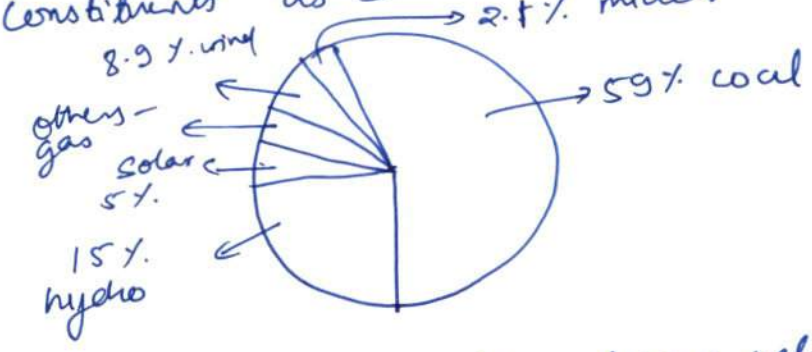
Further any technological efforts towards mechanisation should always consider its impact on women who are largely involved in sowing, weeding etc.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

7. Enumerating the factors that determine a nation's energy-mix, comment on the need for having a diversified fuel basket for meeting India's future energy demands. **(150 words) 10**

किसी राष्ट्र के ऊर्जा-समिश्र (एनर्जी-मिक्स) को निर्धारित करने वाले कारकों को सूचीबद्ध करते हुए, भारत की भावी ऊर्जा मांगों को पूरा करने हेतु एक विविधिकृत फ्यूल बास्केट के होने की आवश्यकता पर टिप्पणी कीजिए।

In power sector, India has almost 300 GW of installed power with constituents as –



Thus India has heavy reliance on coal, but share of renewable energy is increasing.

FACTORS THAT DETERMINE ENERGY MIX

1. Availability of raw materials – like coal easily available but not nuclear fuel
2. Availability of technology – like for renewable energy limiting its

Don't write anything this margin (इस भाग में कुछ ना लिखें)

significant rise.

3. Other factors : cost, environmental concerns, historical factors (like coal based technology 1st to develop) etc.

Need for diversified fuel basket

1. Too much reliance on coal needs to be avoided ~~as~~ due to environmental concerns.

2. Share of nuclear power to replace coal as base load - like Parliament has set target of 25% by 2050.

3. Share of renewable energy needs to rise
- to achieve INDC under Paris treaty
- to address concerns of air pollution and climate change.

4. Need to utilise huge hydro potential in north east.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

8. Despite being a water-stressed economy, micro irrigation penetration in India remains sub-optimal. Discuss the reasons behind it. Also list measures taken by the government to provide an impetus to micro irrigation.

(150 words) 10

एक जल-संकटग्रस्त अर्थव्यवस्था होने के बावजूद, भारत में सूक्ष्म सिंचाई की पैठ उप-इष्टतम (सब ऑप्टीमल) बनी हुई है। इसके पीछे उत्तरदायी कारणों की चर्चा कीजिए। साथ ही, सूक्ष्म सिंचाई को प्रोत्साहन देने हेतु सरकार द्वारा उठाए गए कदमों को भी सूचीबद्ध कीजिए।

Micro irrigation refers to use of techniques like sprinklers, drip irrigation instead of flood irrigation. Its penetration is limited to 5% of irrigated area despite several benefits.

REASONS

1. High initial cost in installation
2. Need for technical knowhow in operation and management
3. Already huge subsidies like free electricity ∴ low incentives for farmers.
4. Signs of water stress are still not too acute ~~to~~ in most parts.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

A. report by UN water predicts that by 2030, India will face severe water crises. Since agriculture accounts for 88-90 % of fresh water consumption, government has taken several measures to give impetus to micro-irrigation.

1. Dedicated fund under NABARD for long term investment in agriculture
2. Capability enhancement of rural youths in new technologies.
3. Pacts with Israel to support technology transfer.
4. Efforts to ~~sy~~ identify and spread scaleable projects.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

9. What are the issues in effective implementation of Targeted Public Distribution System (TPDS) in India? Do you think direct benefit transfer as an alternative to TPDS is a viable solution to attain food security?

(150 words) 10

भारत में लक्षित सार्वजनिक वितरण प्रणाली (TPDS) के प्रभावी कार्यान्वयन में क्या समस्याएं हैं? क्या आप मानते हैं कि TPDS के विकल्प के रूप में प्रत्यक्ष लाभ अंतरण खाद्य सुरक्षा प्राप्त करने का एक व्यवहारिक समाधान है?

Targeted PDS system in India is a mechanism to implement National Food security Act 2013 which assures 66% of country's population rice, wheat and millets at Rs 3/2/1 per kg.

Despite being largest food security initiative, it suffers from several challenges like:

1. Procurement – done by central government through FCI
   - 67% is confined to 5 states.
   - as Shanta Kumar committee pointed out only 5% poor marginal farmers benefit from MSP.
2. Storage – inefficient handling, storage in warehouses and not in silos → rottening of grains.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

3. 3 Distribution. CAG report pointed delays in identification of beneficiaries, inclusion and exclusion errors.

DBT as an alternative? Benefits

1. Give choice to people
2. curb market distortion
3. WTO compliant (as presently procurement cost exceed deminis level)
4. Reduce cost in storage, transportation.
5. Reduce leakages, eliminate ghost beneficiaries.
6. Reduce chances of exclusion, inclusion errors

However there are certain issues like —

1. Money might not be used for food grain ~~production~~ purchase — conspicuous spending
2. last mile connectivity in access to banking services missing

TPDS has served as a win-win situation for farmers as well as poor households. ∴ any efforts at revamp should be well debated.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

10. Assigning infrastructure status to the logistics industry is a good first move, but there are several other problems related to this sector that need to be addressed. Discuss. **(150 words) 10**

लॉजिस्टिक्स (संभार-तंत्र) उद्योग को अवसंरचना का दर्जा देना एक अच्छी आरंभिक पहल है, लेकिन इस क्षेत्रक से जुड़ी अन्य कई समस्याएं हैं जिनसे निपटने की आवश्यकता है। चर्चा कीजिए।

Logistics industry in India is 3rd largest in the world providing employment directly to 1.5 million people.

Assigning infrastructure status will help bring greater funds to (specially long term investment).

However, there are many other challenges which the sector face.

Challenges

1. Delays in environmental / forest clearances (like Bullet train is going to miss the 2018 December starting target)
2. Land acquisition is a hurdle
3. Mostly sector is in unorganised sector - new policy challenges due to GST, eway bills.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. Old, inefficient fleet.
5. Unfavourable ~~mai~~ multimodal mix — heavy reliance on roadways (65%)
6. Cross subsidisation in railways.
7. Need for long term finance but banking credit not picking due to huge NPAs (11.6%).

Measures needed

1. Need for integrated logistics ministry as suggested by Rakesh Mohan committee.
2. Need to attract funding through bonds, and diplomatic talks to receive sovereign wealth funds like UAE.
3. Online single window clearance mechanism.
4. Effective risk sharing in PPP as suggested by Kelkar committee.
5. Need for Wholesale banks
6. Need to address bottlenecks due to e-way bills, GST.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

11. Enhancing private infrastructure spending and revival of stalled projects is critical to the success of Bharatmala Pariyojana. Discuss. Also enumerate measures taken by the government to revive stalled projects on National Highways. **(250 words) 15**

निजी अवसंरचना व्यय में वृद्धि एवं अवरुद्ध परियोजनाओं का पुनरुद्धार भारतमाला परियोजना की सफलता हेतु महत्वपूर्ण है। चर्चा कीजिए। साथ ही, राष्ट्रीय राजमार्गों से संबद्ध अवरुद्ध परियोजनाओं के पुनरुद्धार के लिए सरकार द्वारा उठाए गए कदमों को सूचीबद्ध कीजिए।

Bharatmala Pariyojna is the major infrastructure revamp scheme in the road sector with investment of Rs 5.35 lakh crore and addition of 35,000 km of roads.

Components:
- grid interconnectivity of major highways
- East-West corridors
- Roads efficiency enhancement
- Border connectivity
- coastal area connectivity

For its success, private infrastructure spending and revival of stalled projects is most critical.

PRIVATE SPENDING

1. Economic Survey 2017-18 predicts that by 2030, India needs additional $ 4.5 trillion infrastructure spending,

Don't write anything this margin (इस भाग में कुछ ना लिखें)

But at current pace we would be able to meet only $3.9 trillion. Therefore, role of private sector is crucial.

2. Government with limited budgetary resources need to spend on social-welfare scheme like education, health etc.

3. Private sector brings along superior technology and management professionalism

4. Essential to bridge fiscal deficit. For this, government is increasing engagement through PPP — BOT, EPC, HAM etc.

REVIVAL OF STALLED PROJECTS

1. Stalled projects leads to price escalation, increased debt on borrowed money.

2. Scarce national resources remained roped in unproductive sectors.

3. They lead to increased NPAs on banking sector (11.6 % of Gross

Don't write anything this margin (इस भाग में कुछ ना लिखें)

lending presently) due to which banks are reluctant to lend.

But owing to various efforts by the government, stalled projects have declined from 43% of total projects in 2012 to 25% now.

MEASURES:

1. Faster clearances: new regulations prescribe that no clearance is needed to roads less than 100km.
   - colour coded scheme for environment clearance
2. NIIF – India's sovereign wealth fund to attract investment.
3. Creation of land banks
4. Online, single window clearances.

Further ~~on~~ other measures as per Kelkar committee recommendations like ammending POCA 1988, equitable risk sharing in PPP etc are needed

Don't write anything this margin (इस भाग में कुछ ना लिखें)

12. Going forward, the allied sectors will play a critical role in increasing the resilience and improving economic returns in agriculture. Discuss.

(250 words) 15

आगामी समय में, संबद्ध क्षेत्रक कृषि में लचीलापन बढ़ाने एवं आर्थिक प्रतिफल में सुधार लाने में एक महत्वपूर्ण भूमिका निभाएंगे। चर्चा कीजिए।

Present government has set the target to 'DOUBLE FARMER'S INCOME BY 2022'. For this, Ashok Dalwai committee has specifically outlined role of allied sectors.

POTENTIAL

1. Livestock :
- India has world's largest livestock population at 300million
- It is more equitable than farming as majority of farmers are small and marginal
- Significance in ~~incl~~ women empowerment – as they constitute 75 % of workforce.
- Booming market – in urban India, already percapita consumption at 377 gms is higher than global average.

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2. Agroforestry
- National forestry Policy 1988 clearly identified potential of agroforestry - in additional income as well as meeting forestry targets

3. Poultry / Fishing
- Protein inflation shows growing demand for these products.

4. Others : apiculture,
- These are not dependent on monsoon cycles and ensure regular income.

HOWEVER, there are certain challenges in expansion of allied sector.

1. Livestock - low global prices (especially since EU abolition of quota in 2014)
- Farmers protests in Mandsaur last year showed, they are not getting remunerative prices.
- Milk yield of Indian cattle is much lower.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

2. Poultry / Fishery – Bans on exports were imposed due to not meeting Sanitary and Phytosanitary quality standards
3. Farmers lack technical know how, initial seed capital.
4. Despite huge potential, they receive only 4% of agricultural credit.

BUT, given their immense potential government has taken several steps to promote allied sector

1. Dairy Development fund under NABARD of 10,000 crore
2. NDDB is instrumental in promoting milk cooperatives (Amul success)
3. Backyard Poultry scheme especially for BPL households
4. Allied sector already included in priority sector lending.

Allied sectors promise huge returns, irrespective of monsoon failures, small land size. ∴ needs to be promoted.

Don't write anything this margin
(इस भाग में कुछ ना लिखें)

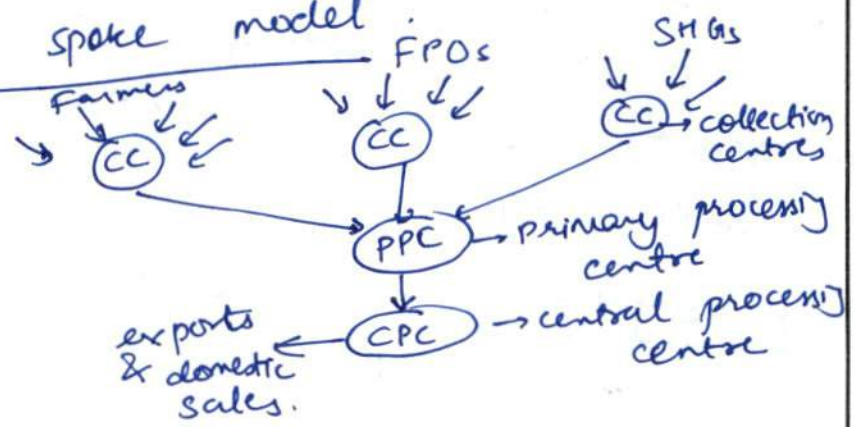
13. Enumerating the features of Pradhan Mantri Kisan Sampada Yojana, discuss its potential for the growth of food processing sector in the country. **(250 words) 15**

प्रधान मंत्री किसान सम्पदा योजना की विशेषताओं को सूचीबद्ध करते हुए, देश में खाद्य प्रसंस्करण क्षेत्रक का विकास करने की इसकी क्षमता की विवेचना (चर्चा) कीजिए।

Pradhan Mantri Kisan Sampada Yojana (PMKSAY) is an umbrella scheme which subsumes all the existing schemes like Mega food Parks, Integrated cold storage development etc.

FEATURES

1. Its main component mega food parks scheme is designed on hub and spoke model.



2. Investment : It aims to increase investment in food processing infrastructure like warehousing,

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cold storages, packaging and handling etc.

3. Reap potential of regional diversities - by locating food processing plants throughout the country including NE region.

4. Reduce logistics cost - through reaping potential of waterways

POTENTIAL FOR FOOD PROCESSING

1. Increase growth - Food processing sector values at $ 135 billion and is growing at 8% per annum but this growth rate can be enhanced to double digit.

2. Create employment - especially for rural youths (Presently, as per ASI 2010 17 lakh people are employed in it)

Don't write anything this margin (इस भाग में कुछ ना लिखें)

3. Reduce food wastage - post harvest losses in India as high as 30-40%.

4. Enhance farmer's income - through value addition to their produce.

5. Foreign exchange earning - India has advantage of geographical proximity to food importing regions like west Asia.

6. Reduce logistics cost through increasing competitiveness - presently it account for 18% compared 8% in China.

Overall, the scheme has advantage that it provides a single support structure rather than multiplicity of schemes with overlapping domains.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

14. Enumerate the factors that determine cropping pattern in an agricultural region. Discuss the need for diversification in context of problems being faced by monoculture regions in India. **(250 words) 15**

किसी कृषि क्षेत्र में फसल पद्धति को निर्धारित करने वाले कारकों को सूचीबद्ध कीजिए। भारत में एकल फसली क्षेत्रों द्वारा सामना की जा रही समस्याओं के संदर्भ में फसल विविधीकरण की आवश्यकता की चर्चा कीजिए।

Cropping pattern refers to cycle of crops that are grown over a ~~pace~~ piece of land throughout the year.

FACTORS THAT DETERMINE IT :

1. Availability of ~~no~~ irrigation facilities
— as monsoon rains confined in 3-4 months
2. weather patterns of the place — like places near Himalayan belt are covered with snow in winter and no cropping possible.
— weather pattern is a key determinant of selecting crop like spices in Kerala.
3. Entrepreneurial ability / capital base with the farmer.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. Government policies relating to procurement as they ensure safety against market failure.

5. Topography / soil type in the region like soyabean, cotton chosen in black soil belt.

Due to unwanted consequences of Green Revolution and government procurement, there is overt focus on cereals leading to monoculture in several regions.

PROBLEMS DUE TO MONOCULTURE

1. Economical costs – Over production leading to price crash of some crops while for other like oilseeds, pulses, India has to rely on imports

2. Environmental costs – monocropping leads to depletion of soil minerals.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

It also causes serious water stress to regions (like ground water depletion in Punjab and Haryana)

3 Others : reduces resilience against crop failure or market failure, increases cost on farmer to apply fertilisers, reduces scope of food processing.

In this light, there is urgent need for crop diversification. Like, in ~~between~~ between two cereals, leguminous crops can be sown which naturally nourish the soil.

The crop chosen should be less intensive on resources and should depend on other minerals than main ~~pro~~ crop.

Understanding its potential government has taken several steps like locating maize processing factory in Patiala to promote maize cultivation.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

15. Discussing the opportunities presented by decentralised energy systems, enumerate their environmental, economic and social benefits along with institutional, technical and financial challenges that they present.

(250 words) 15

विकेन्द्रीकृत ऊर्जा प्रणालियों द्वारा प्रस्तुत अवसरों की चर्चा करते हुए, उनके पर्यावरणीय, आर्थिक और सामाजिक लाभों के साथ-साथ उनके द्वारा प्रस्तुत की जाने वाली संस्थागत, तकनीकी और वित्तीय चुनौतियों को भी सूचीबद्ध कीजिए।

Decenteralised ~~and~~ energy systems are mostly off grid power generation systems such that there is localised generation as well as demand.

OPPORTUNITIES

1. Environmental :
- decentralised solar power plants for heating / lightning can reduce reliance on thermal power - which is major source of global warming.
- They also reduce costs due to deforestation, mining of coal etc.

2. Economic :
- Reduce costs involved in transmission infrastructure - transmission cables, transformers etc.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

- create employment opportunities for local youths in maintenance and operations.

3. Social:
- Will help achieve target 7 of SDG that is access to clean and reliable energy.
- huge potential for rural India - still 4 crore households lack access to energy.
- Improve living standard of people through access to healthcare, education (e-learning).
- Increase farmer's income through cold storages

~~Have~~ Because of there significance DDUGJY had component of decentralised energy systems for LWE / remote villages. And they played critical role in achieving 100% electrification of villages in March 2018.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

However, they do present certain challenges like :

1. Institutional - presently no ~~sign~~ single agency is accountable for it, like overlapping domain of MNRE, IREDA etc.
2. Technical - ~~High~~ technology associated to power storage is still in developmental stage.
   - Also there is dearth of trained manpower
3. Financial - They involve large initial investment though recurring costs are low.

However, in order to achieve vision of 'universal energy access' they form a critical component.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

16. In context of the critical public service role played by the railways, it is difficult to argue that its problems will be solved by privatisation, rather there is a need to work on other options. Discuss. (250 words) 15

रेलवे द्वारा निभाई जाने वाली महत्वपूर्ण सार्वजनिक सेवा को देखते हुए, यह तर्क देना कठिन है कि निजीकरण से इसकी समस्याएं सुलझ सकेंगी। इसके बजाय अन्य विकल्पों पर कार्य करने की आवश्यकता है। चर्चा कीजिए।

Indian railways is the world's largest organisation employing 1.3 million people and transporting 26 million people everyday.

ROLE IN PUBLIC SERVICE

1. Provide hinterland connectivity to remote villages
2. low cost ~~operati~~ services - fares for unreserved category have not been raised from over a decade.
3. Generate large employment

Because of its critical role in public service, it is being run more as a social service organisation than an economic entity. This has lead to various issues plaguing

Don't write anything this margin (इस भाग में कुछ ना लिखें)

Indian railways, giving calls for privatisation.

PROBLEMS IT IS FACING

1. High operational ratio - of 0.95, even exceeded 1 for a brief period in 2017, shows declining profitability.

2. Safety issues - on an average 100 major accidents every year leading to heavy toll on ~~prices~~ lives.

3. Cross subsidisation - freight trains which account only 1/3rd of total trains generate 65% revenue

4. Old, worn out tracks Khanna committee 2008 pointed out that 25% railway tracks need urgent replacement.

5. Problems in delay of trains, customer services (CAG flagged poor quality food), sanitation, security etc.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

In the light of these problems, and increasing competition from roadways and waterways (share of roads in total logistics has increased to 65%), there are proposals of privatisation.

MERITS OF THIS

1. Private sector will bring better technical acumen, managerial capability like in advanced signalling system
2. It can significantly improve customer experiences.
3. Bring greater investment for upgradation

But a poor developing country like India ~~not~~ cannot afford to make railways a completely private organisation. Rather,

- as Bibek Debroy committee suggested outsource non core functions to private sector
- use Non fare sources like monetisation of land.

Formation of Rail Tariff authority is a welcome step.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

17. The irony of high consumer prices when farmers do not receive adequate margin for their produce calls for an overhaul of agriculture marketing. Discuss the various steps taken by government in this regard. Also suggest ways to further reduce the gap between consumer prices and farmer realisation. **(250 words) 15**

जब किसानों को उनकी उपज के लिए पर्याप्त लाभ नहीं मिल पाता है तो ऐसे में उच्च उपभोक्ता कीमतों की विडंबना कृषि विपणन में एक आमूलचूल सुधार की माँग करती है। इस संबंध में सरकार द्वारा उठाए गए विभिन्न कदमों की चर्चा कीजिए। साथ ही, उपभोक्ता कीमतों और किसानों को प्राप्त होने वाले मूल्यों के बीच अंतराल को और कम करने के तरीके सुझाइए।

Agricultural marketing in India is government governed by numerous state controls – APMC act, Essential commodities Act etc. As a result farmers are forced to sell their produce to APMC mandis where traders often form cartels.

Several studies have shown that farmers donot get more than 30-40% of the cost of that consumer pays – due to presence of numerous intermediaries and less scope for price discovery.

In this regard government has taken several steps to reform

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agri- marketing.

MEASURES TAKEN

1. e NAM : through this 585 APMC markets have already been connected and price is determined based on supply and demand.
2. Agri tech Infrastructure fund – to upgrade storage, terminal infrastructure of APMCs
3. Proposal to remove perishables out of ambit of APMC
4. Recent budget proposal to convert rural haats into Gramin Agricultural Markets
5. Model commercial farming act by NITI Aayog to give greater freedom to farmers.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

Further to reduce gap in prices what consumer pays and farmers get, following measures can be taken :

1. Encouraging Farmer's Producing Organisation to directly market their produce
2. Removing restrictions under Essential commodities Act.
3. Encouraging variation through organic farming which fetch higher prices.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

18. Identifying the key elements under the Mission for Integrated Development of Horticulture (MIDH), briefly explain how it can lead to holistic development of the horticulture sector in India. Also elaborate the factors which act as roadblocks for the efficient supply chain of Fruits and Vegetables sector in India. **(250 words) 15**

बागवानी के समन्वित विकास के लिए मिशन (मिशन फॉर इंटीग्रेटेड डेवलपमेंट ऑफ़ हॉर्टिकल्चर: MIDH) के अंतर्गत प्रमुख तत्वों की पहचान करते हुए, संक्षेप में व्याख्या कीजिए कि यह भारत में बागवानी क्षेत्रक के समग्र विकास को किस प्रकार बढ़ावा दे सकता है। साथ ही, भारत में फल एवं सब्जी क्षेत्रक हेतु प्रभावी आपूर्ति श्रृंखला में बाधक के रूप में कार्य करने वाले कारकों का सविस्तार वर्णन कीजिए।

India is world's 2nd largest producer of fruits, vegetables with 1st position in mangoes, banana and several others. In order to promote the holistic development of this sector, government has started MIDH.

KEY ELEMENTS

1. National Bamboo mission - to increase bamboo productivity in north east
2. Providing technical assistance through better quality seeds
3. Help farmers build resilience against climate change.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. Coconut development board - for financial and technical support to coconut farmers.
5. Provide assistance to increase value addition, to increase market value and reduce perishability.
6. Assistance to exporting organisations.

ROADBLOCKS IN EFFICIENT SUPPLY CHAIN

1. Procurement : is not done at door-step of farmer - who often lack storage facility - leading to distress sale.
2. ~~leads~~ Storage - ~~lack~~ inadequate cold storages, vehicles with cold storage refrigerators leading to high perishability.
3. Value addition - presently it is limited to 30-40% of total yield.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. Marketing - Farmers donot have marketing freedom, leading to poor price discovery.

In this light, MIDH holds significance.

1. It can improve post harvest storage facilities

2. Through satellite monitoring (CHAMAN project) yield can be estimated and advanced measures can be taken to curb inflation

3. Along with this budget provisions of Operation TOP (for tomato, onion and potato), APMC reform measures to remove perishables, PMFBY uniform insurance at 5% premium also contribute to holistic development of sector.

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19. It is argued that fertilizer subsidies have a negative impact on promoting Organic farming in India. Comment. Also, critically analyse the advantages of replacing direct benefit transfer in fertilizers with direct income support for farmers. **(250 words) 15**

यह तर्क दिया जाता है कि भारत में जैविक खेती को बढ़ावा देने में उर्वरक सब्सिडी का एक नकारात्मक प्रभाव रहा है। टिप्पणी कीजिए। साथ ही, उर्वरकों के लिए प्रत्यक्ष लाभ अंतरण के बदले किसानों को प्रत्यक्ष आय सहायता प्रदान करने के फायदों का आलोचनात्मक विश्लेषण कीजिए।

Organic farming is a type of farming which involves minimal to zero usage of chemical fertilizers, pesticides, herbicides etc and rely on organic manure, vermiculture and soils natural capacity to regenerate.

It has a booming market due to increasing disposable income of people and greater health concerns. However the supply is unable to keep up with demand.

NEGATIVE IMPACT OF FERTILISER SUBSIDY

Farmers in India are indirectly given huge subsidies (amounting

Don't write anything this margin (इस भाग में कुछ ना लिखें)

to almost ₹0,000 crore in 2017-18) for NPK fertilisers. This has lead to greater usage of fertiliser and Low incentive to move to organic farming.

Also yields of high quantum can be achieved through application of fertilizers

Manure needs to be applied in bulk quantity - making it less user friendly.

Advantages of DBT

1. Presently subsidies are given to fertilizer companies based on nutrient content → lead to inefficient firms continuing ~~opps~~ operations.

2. Huge underrecoveries for firms due to delays in payment.

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3. Only 50% of subsidy reach small marginal farmers who constitute 85% of total farmers.

4. Diversion of subsidised urea to ~~ear~~ industries, neighbouring countries.

5. Additionally, it will help resolve inclusion exclusion errors.

However, given that fact that majority of farmers are small and marginal, they often lack working capital to purchase at market cost and later get refunded by DBT.

Therefore my proposal for DBT should be first tested on a smaller scale.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

20. What do you understand by Seed Replacement Rate? Explaining the concept of breeder, foundation and certified seeds, highlight the major policy initiatives taken in order to address the challenge of quality seed availability to farmers. **(250 words) 15**

बीज प्रतिस्थापन दर (सीड रिप्लेसमेंट रेट) से आप क्या समझते हैं? ब्रीडर, फाउंडेशन और प्रमाणित बीजों की अवधारणा की व्याख्या करते हुए, किसानों के लिए गुणवत्तापरक बीजों की उपलब्धता की चुनौती का समाधान करने हेतु की गई प्रमुख नीतिगत पहलों पर प्रकाश डालिए।

Seed Replacement Ratio refers to the ~~proportion~~ ratio of seeds which are certified to that of farm saved seeds.

Presently, various government R&D organisations under ICAR and private players breed various seed varieties to inculcate desirable traits like short growing season, higher yield, greater tolerance to droughts etc. These seeds are called breeder seeds and the seeds which are bred are called foundation seeds.

Finally after research and farm testing, the seeds

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which have been certified for quality are called certified seeds.

Challenges presently

1. low seed replacement ratio

2. high cost of certified seeds due to monopolisation (like monsanto in cotton)

3. As a result low yields in India.

4. Create vulnerability to pest attack, monsoon deficit

Policy Initiatives

1. National Seed mission 2012 which aims to increase seed replacement ratio

2. Anti monopolistic policies like government recently cut royalty to Monsanto.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

3. Plant varieties is a component of intellectual property rights to encourage initiatives by farmers.

4. Research by public funded laboratories like Pusa which developed ~~to~~ high yielding variety of arhar.

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GENERAL STUDIES (TEST CODE : 1103)

Name of Candidate	Chahat Bajpai		
Medium Eng./Hindi	Eng.	Registration Number	22842
Center	~~Online~~ R.N	Date	03/08/18

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
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16	15	
17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are TWENTY questions printed in ENGLISH & HINDI
   इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. All questions are compulsory.
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

Don't write anything this margin (इस भाग में कुछ ना लिखें)

1. Technical solutions are necessary to augment the traditional methods of guarding the border. In this context, while mentioning the different components of Comprehensive Integrated Border Management System (CIBMS), discuss how it can help to address the gaps in the present system of border security. **(150 words) 10**

सीमा चौकसी की पारंपरिक विधियों का संवर्द्धन करने हेतु तकनीकी समाधान आवश्यक हैं। इस संदर्भ में, व्यापक एकीकृत सीमा प्रबंधन प्रणाली (कॉम्प्रिहेंसिव इंटीग्रेटेड बॉर्डर मैनेजमेंट सिस्टम: CIBMS) के विभिन्न घटकों का उल्लेख करते हुए, चर्चा कीजिए कि सीमा सुरक्षा की वर्तमान व्यवस्था में विद्यमान कमियों को दूर करने में यह कैसे सहायता कर सकता है।

India shares a long international border of almost 15,000 km and 75,00 km maritime boundary.

Traditional methods of guarding border include fencing, patrolling, installing floodlights. However as various issues along borders shows these have not fully succeeded.

Issues
- Insurgents movement, Drugs peddling along Myanmar border.
- infiltration, drugs smuggling along Pakistan border
- low militaro preparedness as Doklam crises showed
- human trafficking, illegal migration along eastern front

In this context, ~~the~~ government has

Don't write anything this margin (इस भाग में कुछ ना लिखें)

~~Govt~~ embarked on CIBMS. (Madhav Godbole committee also supported it.

Various Components of CIBMS and how they can ~~th~~ help

① CCTV camera	- for continuous monitoring, remote monitoring.
② Thermal imaging night vision devices	- as most of infiltration done at night under gaurb of ~~of~~ darkness
③ Underground sensors	to detect underground canals
④ Battle surveillance radars	to detect any military installment near the borders
⑤ Border fence	it forms the basic requirement.

Along with these, cooperation, ~~and~~ support and goodwill of local people is very crucial for effective border management.

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2. In comparison to conventional warfare, the possibility of successful deterrence against cyber warfare is both limited and complicated. Discuss. Also, elaborate upon India's preparedness in this regard. **(150 words) 10**

पारंपरिक युद्ध की तुलना में, साइबर युद्ध के विरुद्ध सफल भयादोहन (निवारण) की संभावना सीमित और जटिल दोनों है। चर्चा कीजिए। साथ ही, इस संबंध में भारत की तैयारियों का सविस्तार वर्णन कीजिए।

~~For~~ Cyber warfare is emerging 4th battlefield after land, water and air.

Unlike others, possibility of successful deterrence is limited as shown by fact ~~that~~ ~~was~~ in ~~attack~~ Ransomware attack worst affected countries (USA, UK) were the most advanced countries.

WHY LIMITED AND COMPLICATED?

① Hackers need to ~~enter~~ access through only one server while authorities need to safeguard all the servers.

② Involvement of adversary nation makes it complicated.

③ There can be leaks from any disgruntled employee as well.

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(4) Further offensive capability is limited by fact that hackers can easily hide their location through IP changes.

India's Preparedness

(1) India has set up CERT-In as prime agency responsible to deal with cyber crimes.
Also sectoral certs like - CERT-fin for financial sectors.

(2) Policy measures like 'National Cyber security Policy 2013' → aims to train 5 lakh manpower

(3) National Critical Infrastructure Protection centre for critical infrastructure like power system, nuclear installments

(3) Cyber Swachhta Kendra - to avail technological as well as awareness enhancement.

(5) Several states have set up special wings of police like Maharashtra

Don't write anything this margin (इस भाग में कुछ ना लिखें)

3. Analyse the impact that the instability in the wider South Asian region has on India's internal security. What steps can be taken to minimise such impact? **(150 words) 10**

विस्तृत दक्षिण एशियाई क्षेत्र में अस्थिरता का भारत की आंतरिक सुरक्षा पर पड़ने वाले प्रभावों का विश्लेषण कीजिए। ऐसे प्रभावों के अल्पीकरण हेतु क्या कदम उठाए जा सकते हैं?

It is said that 'you can change your friends, but you cannot change your neighbours'. This automatically links India to entire south Asian region.

IMPACT OF INSTABILITY ON INDIA

① Economic impact - like madhesi protest in Nepal blockaded the supplies from India and brought trade to a halt.

② social impact - It can trigger refugee crises like almost 40,000 rohingya have come to India after persecution in ~~Alp~~ Myanmar,

③ security implications - instability provide flourishing ground to radical propoganda of terrorists

Don't write anything this margin (इस भाग में कुछ ना लिखें)

like growing radicalisation in Maldives, it has been largest supplier of ISIS troopes per capita.

(4) Political impact - It can bring diplomacy to a halt like military in Pakistan - promoting infiltration of terrorists leading to suspension of SAARC talks.

In order to minimise such effects efforts are needed to boost ~~be~~ peace and tranquility in the whole region as well as strengthen our domestic defence.

On external front	On Internal front
- Diplomacy engagement with neighbours based on 'Gujral doctrine', 'Neighbourhood first'	- Increase border security.
- Promote connectivity through BBIN, SAFTA for shared prosperity	- Formulate uniform policy for refugees
	- use data analytics to track ISIS influence

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. Highlighting its mandate, discuss the significance of International Solar Alliance in positioning India to a key global leadership role. **(150 words) 10**

अंतर्राष्ट्रीय सौर गठबंधन के अधिदेश पर प्रकाश डालते हुए, भारत को एक प्रमुख वैश्विक नेतृत्वकर्ता की भूमिका में स्थान दिलाने में इसके महत्व पर चर्चा कीजिए।

On the sidelines of COP21, Paris conference, India along with France announced the formation of International Solar Alliance

Mandate - to provide all member nations ~~too~~ lying partially or fully between tropic of cancer and capricorn following benefits.

(i) low cost renewable energy finance

(ii) cooperate in R&D

(iii) promote manufacturing of solar PV in member nations.

(iv) to streamline tariffs to encourage solar energy.

(v) overall to achieve low hanging fruits like applications in agriculture

Don't write anything this margin (इस भाग में कुछ ना लिखें)

ISA has set the target to mobilise $1 trillion by 2030 to achieve 1000 GW installation of solar power.

Significance for India

① Emergence of India as leader of war against climate change and showing affirmation to its commitments on INDCs.

② First intergovernmental treaty institution to have secretariat in India.

③ To achieve domestic policy goals like 'Make in India' (like through easy availability of raw materials from Chile, Congo which have sources of lithium)

④ To counter China lead measures like OBOR through more democratic platforms.

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5. Despite a strong case for a Broad-based Trade and Investment Agreement (BTIA) between India and the European Union (EU), negotiations have been stuck for long owing to multiple factors. Analyse. **(150 words) 10**

भारत और यूरोपीय संघ (EU) के बीच व्यापक आधार वाले व्यापार और निवेश समझौते (ब्रॉडबेस्ड ट्रेड एंड इन्वेस्टमेंट अग्रीमेंट: BTIA) हेतु सुदृढ़ परिस्थितियां होने के बावजूद कई कारकों के चलते वार्ता लम्बे समय से अटकी हुयी है। विश्लेषण कीजिए।

India's trade with EU values around $88 billion (FY16), making it the largest trading partner. Yet this is far below the potential as China's trade with EU is almost $500 billion.

Challenges to BTIA

What India demands and EU disagrees?

① Data secure status to India as the cost of compliance of with IT provisions is very high.

② Greater market access to generic medicines.

③ Free movement of professionals Mode 1 (KPO/BPO/ITeS) and

Don't write anything this margin (इस भाग में कुछ ना लिखें)

Mode 4 (natural movement of people)

(4) Reduced technical barriers to trade and Sanitary and Phytosanitary measures like on agriculture

What EU demands and India is unwilling to concede?

(1) An independent investor state dispute resolution mechanism due to delays in Indian courts

(2) Reduced tariffs on automobiles and wines and spirits

(3) Stringent IP protection measures.

At a time when India is losing edge to competitors like Vietnam and Bangladesh in low cost manufacturing and EU is witnessing Brexit uncertainities, time is opportune to finalise BTIA by discussions and deliberations for mutual benefits.

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6. Accession to the Ashgabat agreement is valuable for connecting India to its extended neighbourhood. What is the Ashgabat Agreement? Assess its significance for India. **(150 words) 10**

अश्गाबात समझौते में शामिल होना वस्तुतः भारत के लिए अपने विस्तारित पड़ोस से जुड़ने की दृष्टि से मूल्यवान है। अश्गाबात समझौता क्या है? भारत के लिए इसके महत्व का मूल्यांकन कीजिए।

Ashgabat Agreement is an agreement which is an extension of INSTC signed by India, Iran and Russia. It aims at ~~pst~~ ~~boost~~ boosting connectivity through Persian Gulf ~~then~~ Caspian sea through Russia ~~to~~ till Europe.

Significance

① Economic significance: as trade with central Asia is much below its true potential

② Strategic significance: to counter Chinese influence spreading through OBOR.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

(3) Cultural diplomacy – through spreading yoga, bollywood.

(4) Connectivity - shorter routes to Europe, bypassing APPTA to access Afghanistan.

(5) Boost Connect Central Asia Policy, However the initiative has been delayed due to withdrawal of Russia, lack of funding.

Therefore India need to take lead.

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7. The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a natural choice for India to fulfill key foreign policy priorities. In this context, discuss the issues behind hitherto slow progress and the reasons for reinvigorated optimism regarding BIMSTEC.

(150 words) 10

बहु-क्षेत्रीय तकनीकी एवं आर्थिक सहयोग के लिए बंगाल की खाड़ी पहल (BIMSTEC), भारत के लिए अपनी विदेश नीति संबंधी प्रमुख प्राथमिकताओं की पूर्ति हेतु एक स्वाभाविक चयन है। इस संदर्भ में, अब तक हुई धीमी प्रगति के पीछे निहित मुद्दों और BIMSTEC के संबंध में पुनर्जीवित होते आशावाद की चर्चा कीजिए।

BIMSTEC is a political-economic cooperation of 7 countries — India, Bhutan, Nepal, Bangladesh, Myanmar, Thailand and SriLanka.

With SAARC remaining stalled, India is giving significance to BIMSTEC as visible from invitation extended to BIMSTEC members in Goa BRICS summit 2016.

WHY SLOW PROGRESS?

① Lack of connectivity -
- Bhutan didnot join Motor Vehicles agreement.

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- Progress on Kaladan project and IMT is slow.

(2) Poverty high in all member nations

(3) Substantial improvement is limited due to low financial committments by India.

(4) Palpable influence of China on Myanmar

(5) Other reasons: acrimonisity due to Rohingya crises.

Renewed ~~inf~~ importance as –

- SAARC stalled since UN attack in 2016
- Significance of regional trade in development – like WB pointed out that South asian trade is only 5% of the potential
- Trade deficit with Thailand.

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8. What do you understand by Free Space Optical Communication (FSOC) Technology? Critically explain its potential in connecting rural and remote areas in India. **(150 words) 10**

फ्री स्पेस ऑप्टिकल कम्युनिकेशन (FSOC) प्रौद्योगिकी से आप क्या समझते हैं? भारत में ग्रामीण और दूरस्थ क्षेत्रों को जोड़ने में इसकी क्षमताओं की आलोचनात्मक व्याख्या कीजिए।

FSOC is a technology to to use 'free space' as a medium for data transmission. Recently X llc of Alphabet Corporation signed an agreement with Andhra Pradesh government regarding this.

Potential in connecting rural and remote areas —

(i) Low cost - donot need laying down costly optical fibres

(ii) Easy to reach remote, naxal-hit tribal villages as infrastructure requirement initially is low.

Don't write anything this margin
(इस भाग में कुछ ना लिखें)

iii, High speed - on par with optical fibres

iv, Potential in tele education, tele - health.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

9. What are Orphan Drugs? Examine the significance of putting in place a policy framework for such drugs in a developing country such as India.

(150 words) 10

ऑर्फन ड्रग्स क्या हैं? भारत जैसे एक विकासशील देश में ऐसी दवाओं हेतु एक नीतिगत ढांचा स्थापित करने के महत्व का परीक्षण कीजिए।

Orphan drugs are those drugs which are needed to treat rare genetic disorder which have chances of occuring less than 1 per lakh population. (WHO)

Significance of policy framework

① Given the rareness, the incentives to invest in R&D is less.

② Even those who invest charge unaffordable prices for the drugs.

Hence role of state which is committed to well being of all becomes very crucial.

Government funding support is needed for Research. Also

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measures are needed so that there is no discrimination against people of rare disease in insurance.

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10. Discuss the obstacles in women's access to science education in India and also suggest remedial measures to overcome these obstacles.

(150 words) 10

भारत में विज्ञान की शिक्षा तक महिलाओं की पहुंच के मार्ग में आने वाली बाधाओं पर चर्चा कीजिए और इन बाधाओं को दूर करने के लिए उपचारात्मक उपाय भी सुझाइए।

Reports show women constitute only 14% of STEM professionals in India. Recently MHRD minister also admitted that girls enrollment in IITs has only increased slightly from abysmal 8%.

Obstacles

① Patriarchal mindset - women's work limited to household, child rearing

② Women encouraged to take up Arts, fashion, design - as thought incapable for high-tech studies.

③ Long gestation period in Science R&D - and women

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drop out due to family commitments

(4) Lack of role models in science field.

Measures needed

(1) Scholarships to women like for admission on IITs based on recommendation of Timothy Gonsalves committee

(2) STEP program by ~~MH~~ DST to encourage women professionals to rejoin science R&D.

(3) Better creche facility, Maternity benefit bill 2017 to fulfil family commitments also.

Overall the campaign through Beti Bachao Beti Padhao to counter patriarchal mindset of society.

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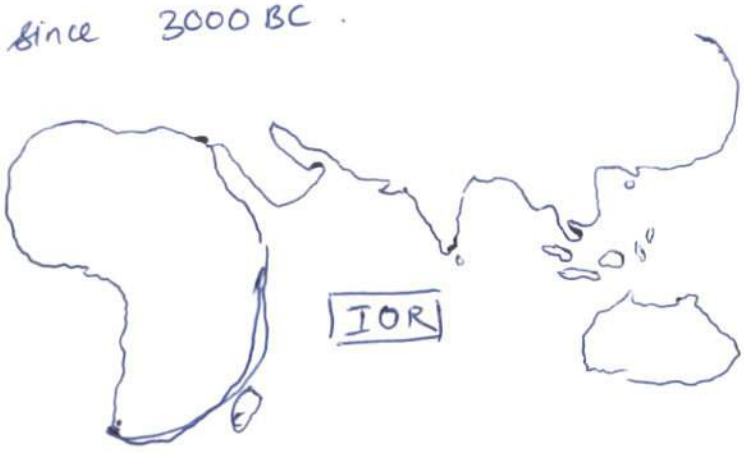
11. Giving examples, elaborate how India's approach to becoming a net security provider in the Indian Ocean Region is taking shape. What are the challenges and opportunities associated with this approach? **(250 words) 15**

उदाहरण देते हुए, सविस्तार वर्णन कीजिए कि किस प्रकार हिंद महासागर क्षेत्र में वास्तविक सुरक्षा प्रदाता (नेट सिक्यूरिटी प्रोवाइडर) बनने का भारत का दृष्टिकोण आकार ले रहा है। इस दृष्टिकोण से संबद्ध चुनौतियां एवं अवसर क्या हैं?

Historically, Indian ocean Region (IOR) has been a region of peace and prosperity with India having trade ties with Africa and Arab world since 3000 BC.



INDIA's APPROACH TO BECOMING NET SECURITY PROVIDER

① Naval Supremacy : India has largest navy with 140 warships and 250 aircrafts.

- It has played role in not only

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conventional and non-conventional security threats like combating piracy but also in Humanitarian Assistance and Disaster relief.

Eg. Role during 2004 Tsunami in evacuation.

- Further to facilitate its operations naval facts - giving refuelling facilities have been signed to get access to Duqm port of Oman and Changi port of Singapore.

② Cultural Diplomacy - through efforts like Project Mausam invoking historical ties with the region

③ Political Diplomacy - through cooperation at IOR-ARC, BIMSTEC, Indian Ocean Naval Symposium and bilateral and multilateral exercises.

④ Economic Diplomacy - through Afro-Asian Growth corridor

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CHALLENGES

① China's growing presence - at Hambantota in Sri Lanka, at Gwadar port in Pakistan, military base in Djibouti, Kyapku in Myanmar; overall its string of pearls policy.

② Presence of other foreign powers like US at Diego Garcia

③ Indian navy's capacity - like delay's in project 75 to make scorpene class submarine.

OPPORTUNITIES

The approach is to idea of 'Security and Growth for all in the region' and follows a multilateral, democratic, respecting sovereignty of nations. This gives India edge over other superpowers in the region.

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12. The UNODC (United Nations Office on Drugs and Crime) has pitched for the need of an integrated approach in order to address the difficulties in preventing, detecting, investigating and prosecuting Transnational Organised Crimes (TOC). Elaborating on these difficulties, discuss how an integrated approach can help in tackling TOCs. **(250 words) 15**

पार-राष्ट्रीय संगठित अपराधों (ट्रांसनेशनल ऑर्गनाइज्ड क्राइम्स: TOCs) को रोकने, पता लगाने, जाँच करने और अभियोजित करने में आने वाली कठिनाइयों से निपटने के लिए UNODC (यूनाइटेड नेशंस ऑफिस ऑन ड्रग एंड क्राइम्स) ने एक एकीकृत दृष्टिकोण की आवश्यकता पर बल दिया है। इन कठिनाइयों का सविस्तार वर्णन करते हुए, चर्चा कीजिए कि किस तरह एक एकीकृत दृष्टिकोण से TOCs से निपटने में सहायता मिल सकती है।

Transnational Organised Crimes (TOC) refer to organised syndicates of drug peddlers, human traffickers, wildlife traffickers etc.

DIFFICULTIES IN PREVENTING, DETECTING AND INVESTIGATING THESE CRIMES

① Multi-country nature of the crime.

Like

② Presence of hostile states in the region. Eg. Pakistan ISI has been often encouraging drug smuggling in India.

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③ Porous Borders in South Asia - like a major part of Bangladesh border is not fenced, and is overcrowded and inhabited to the last inch.

④ Often the victim of human trafficking is lured for jobs or on pretext of marriage and for long is unaware of the syndicate.

⑤ Extreme poverty, illiteracy in the region further promote it.

⑥ special provisions like Free Border Regime in the north east has made it easy for traffickers to move across the border.

INTEGRATED APPROACH

① Cooperation among nations - through platforms like SAARC, signing Mutual Legal Assistance treaty for ease of extradiction.

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② Clear legal provisions - article 23 of constitutions prohibit any trafficking further, the trafficking (prohibition and prevention) bill 2018 tries to bring legal clarity and is victim centric approach.

③ Cooperation among security agency like BSF and BGB (Border Guards Bangladesh) in joint patrolling.

④ Rehabilitation, alternate skill training of opium, poppy cultivators.

⑤ Cooperation among authorities so that victim is not harassed twice

⑥ Enhance security features in currency to avoid FICN.

A few years ago UNTR called South Asia as source, transit and destination of trafficking. Given the gravity of problem, only an integrated and collaborative effort among nations can help bring result.

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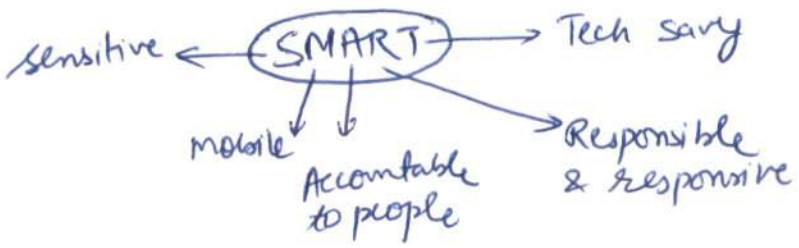
13. Highlighting the need for SMART policing in India, suggest some administrative, legislative and technological reforms in order to realize this vision. **(250 words) 15**

भारत में SMART पुलिसिंग की आवश्यकता पर प्रकाश डालते हुए, इस दृष्टि को साकार करने के लिए कुछ प्रशासनिक, विधायी और तकनीकी सुधारों का सुझाव दीजिए।

Police in India has evolved continuously from colonial - rule mindset but still need reforms to meet needs of present times.

Colonial time: Police to maintain law & order, suppress dissent	Post independence Rule bound, accountability to superiors	Present 'SMART' police



NEED FOR SMART POLICING

Need arises due to various lacunae presently engrossing the police.

① Public perception - of police is very negative, they hold policemen in low esteem and think police is inefficient

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and unresponsive.

(2) Ill equipped to handle new challenges like cyber crime.

(3) Reactive and 'not proactive' - have not been able to take advantage of data analytics in crime tracking

(4) Need for inclusiveness like including women, transgender etc

(5) Need for accountability to people and reduce political interference

(6) Case of custodial deaths, fake encounter.

REFORMS

(1) Administrative : SC in Prakash Singh case laid down very elaborate administrative reforms like -

(i) Appointment of DGP based on merit and fixed tenure of 2 years (recently suggested based on UPSC recommendation)

(ii) Establishment of Police Establisment Board to handle transfers and promotions

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iii) Constituting National and state security commissions for continuous reforms.

However, as KT Thomas committee pointed out no state have implemented them in spirit.

Legislative - presently policing is governed by Police Act 1861; The recommendation of Police Act drafting committee or Soli Sorabjee committee needs to be accepted.

- Also need to reform IPC, criminal justice system as per Malimath committee reforms.
- NHRC need to be empowered further to investigate and award sentences in human rights abuse cases.

Technological - CCTNS system needs to be integrated with e-courts, e prisons.

- Also the arms and ammunition need to be upgraded.

Further need for community policing, pink initiative like Kerala and efforts to involve people like Operation Nirbheek of Delhi Police.

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14. Discuss the reasons behind private sector playing a merely peripheral role in defence manufacturing in India. Also, explain how the Draft Defence Production Policy, 2018 seeks to augment private sector participation in defence manufacturing in India. **(250 words) 15**

भारत में रक्षा विनिर्माण के क्षेत्र में निजी क्षेत्रक द्वारा अत्यंत गौण भूमिका निभाने के पीछे उत्तरदायी कारणों की चर्चा कीजिए। साथ ही, व्याख्या कीजिए कि किस प्रकार ड्राफ्ट डिफेंस प्रोडक्शन पॉलिसी, 2018 (रक्षा उत्पादन नीति मसौदा, 2018) भारत में रक्षा विनिर्माण के क्षेत्र में निजी क्षेत्रक की भागीदारी बढ़ाना चाहती है।

As per Stockholm International Peace ~~Reach~~ Research Institute, India is the largest defence importer accounting for 12% of total imports between 2012-17.

A major cause is that defence manufacturing in India is confined to ordinance factories, public sector which are of inefficient and unable to meet the global R&D levels.

REASONS FOR LOW PRIVATE SECTOR PARTICIPATION

① Historically, the 'Request for proposal' were rejected mainly giving reason 'lack of experience'

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(2) FDI restrictions of 49% under automatic route.

(3) corruption, red tapism in giving licenses.

(4) Since government is sole buyer, there was no clarity / assurance that produced equipments will be purchased.

(5) Faulty negotiations, which didnot make technology transfer compulsory.

Defence Production Policy 2016 tried to ~~und~~ reverse this trend by streamlining private participation through 'Make Procedure' and introducing 'Indigenously Developed Designed and Manufactured' category

Draft Defence production Policy 2018, further attempts to augment this by —

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(i) Formally accepting strategic partnership model (which was proposed by Shekhtar committee) to allow private players to collaborate with a foreign partner.

(ii) Sets target to emerge as 5th largest defence manufacturer by 2025 and achieve self reliance in 13 sectors.

(iii) Proposes FDI like to 74% under automatic route.

(iv) Proposes implementation of Make procedure by 'Make II' procedure

(v) Proposes 'Defence Innovation Fund' to provide seed funding to startups.

All these measures are clearly aimed to 'make India self reliant' in defence sector through equal participation of private sector.

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15. While India and Russia have enjoyed good relations since the Soviet era, relying on the past may not be enough to deal with shift in the relationship in light of the rapidly evolving geopolitical realities. Comment.

(250 words) 15

यद्यपि सोवियत युग से ही भारत और रूस के संबंध मधुर रहे हैं, तथापि अतीत पर निर्भरता तेज़ी से विकसित होती भू-राजनीतिक वास्तविकताओं के प्रकाश में, संबंधों में आये बदलाव से निपटने हेतु पर्याप्त नहीं भी हो सकती हैं। टिप्पणी कीजिए।

India and Russia have shared deep multifaceted relations ever since independence. An 'anti-imperialist' India always sympathised with 'communist Russia' and viewed it as an alternative to capitalist order.

GOOD RELATIONS SINCE SOVIET ERA

① After independence, when 'western nations' refused to share technological expertise, USSR helped setup 'Bhilai steel plant', Indian institutes of technology etc.

② USSR also supported India by vetoing 'Kashmir resolution' when USA was clearly biased towards its CENTO, SEATO ally Pakistan.

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③ The two also signed 'Indo-USSR friendship treaty 1971' which kept foreign powers at distance during 1971 war.

④ It has also being a major defence supplier – MIG-21, Sukhoi, Brahmos and even has shared technology.

However, past bonhomie is not enough due to changing geopolitical situation.

Changing geopolitics –

① Growing proximity between USA and India : two collaborating on Quad platform.

② India diversifying defence supplies – share of Russia has fallen from 75% to 62% and US has increased from 2.5% to 13% in past 3 years.

③ Russia in talks to sell high-tech equipment to Pakistan and even conducting first bilateral

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military exercises.

WHAT IS NEEDED?

* A revamped push is needed to keep this historical ally an important partner in changing times.

① Political cooperation – India's membership in SCO provides a new opportunity.

② Economic ties – Finalising FTA with Eurasian economic union
- Enhancing cooperation in diamond trade

③ P2P and cultural diplomacy through promoting tourism, yoga, bollywood etc.

Moreover India need to assure Russia of its 'strategic autonomy' and assure that Russia remains a key defence partner through supplies of spare parts, servicing etc. Also the two can collaborate with project in 3rd country like nuclear reactor in Bangladesh.

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16. In what ways has the engagement between India and its diaspora evolved over the years? What role can the Indian diaspora play in furthering and shaping India's foreign policy goals? **(250 words) 15**

भारत और इसके डायस्पोरा के बीच सहभागिता बीते वर्षों के दौरान किस तरह विकसित हुई हैं? भारत की विदेशी नीति के लक्ष्यों को आगे बढ़ाने और आकार देने में भारतीय डायस्पोरा क्या भूमिका निभा सकते हैं?

As per MEA data, India has 31 million strong diaspora all over the world.

HOW RELATION HAS EVOLVED?

① Post Independence - PM Nehru asserted that either The Persons of Indian Origin (PIO) should take Indian citizenship or should completely become committed to nation of their residence.

It also asked Indian diaspora in Africa to actively fight against colonialism and apartheid.

This 'attitude of indifference' was to some extent, to ensure safety and social attacks on Indian like 1962 ouster in Uganda, Ethiopisation of education etc.

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② Due to overt 'anti-Brahman' nature of dravidian movement, rigid economic policies like MRTP, licensing — migration of educated increased during 1960s, 70s

③ In recent times, we seems to have understood significant role diaspora can play as visible from —
(i) address of PM in Madison square, USA and in Singapore
(ii) Annual organisation of 'Pravasi diwas'
(iii) 'Know India Program' to increase awareness about soil in India.

ROLE OF DIASPORA IN FURTHERING FOREIGN POLICY GOALS

① Political diplomacy - like role in finalisation of civil nuclear deal with USA, and now in getting CAATSA waiver is said to be due to strong Indian lobby in USA -

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② Economic diplomacy - Diaspora help in development through investment remittances (India received highest at around $77 billion)

③ Soft power diplomacy - diaspora closely preserves its culture, religion
→ increase curiosity about India - boost tourism
→ promote yoga, bollywood.

④ Social - diplomacy like through brain gain (circular movement)
- philanthropy - like investing in their alma mater
- social entrepreneurship - like Aravinda and Ravi based on whose like Swades movie is made.

However in present times, diaspora faces numerous challenges like nitaqat scheme in Saudi Arabia, xenophobia, H1B visa row, etc.
Therefore India needs to continuously engage to ensure that they are not at distress.

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17. Sluggish progress of the Doha round signals that the WTO is proving to be ineffective in promoting free trade. Identifying the factors behind this, comment on the relevance of WTO in present context. **(250 words) 15**

दोहा दौर की धीमी प्रगति संकेत करती है कि WTO, मुक्त व्यापार को प्रोत्साहित करने में अप्रभावी सिद्ध हो रहा है। इसके पीछे उत्तरदायी कारकों की पहचान करते हुए, वर्तमान संदर्भ में WTO की प्रासंगिकता पर टिप्पणी कीजिए।

WTO ministerial meet at Buenos Aires in 2017 ended without any consensus on key issues of Doha round, like agriculture subsidies of developed countries, permanent solution on public procurement, special safeguard mechanism etc.

FACTORS BEHIND THIS :

① Non-cooperative attitude adopted by ~~d~~ USA and other developed countries.
- They attempt to bring new issues like e-commerce, investment in which they already have an edge.

② Growing Protectionism like trade war between US and China.

③ Increasing bilateral, multi-lateral

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locations like ~~Comprehensive~~ Transatlantic partnership, Comprehensive agreement on transpacific partnership, RCEP etc.

(4) Push for TRIPS plus safeguards like removing of compulsory licensing, permitting evergreening and data exclusivity.

(5) Misuse of agriculture subsidies like increasing green box by developed nations to keep global prices low.

It is said that given the sluggish progress at WTO, it has lost its relevance in present times and countries should cooperate at bilateral, multilateral levels.

However we must not forget that this is not the first time that WTO is in limbo, it has earlier witnessed several failed summits, yets it remains significant.

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RELEVANCE TODAY

① Regional treaties cannot be substitute to global agreement – as these push for stringent environment, labour laws which lead to trade diversion from non members. If

② WTO dispute settlement body remains fair and effective like ~~not~~ unlike WB, IMF it is never criticised to be biased for western countries.

③ WTO provisions are egalitarian, respond to needs of developing countries (like intellectual property flexibility allowing generic medicines), free trade to LDCs and these need to continue to bridge north - south divide.

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18. India's engagement with its extended neighbourhood in West Asia has evolved into a 'Look West' approach in recent times. However, multiple faultlines in this volatile region require a balancing act on the part of India. Discuss. **(250 words) 15**

पश्चिम एशिया में अपने विस्तारित पड़ोस के साथ भारत की सहभागिता हाल के दिनों में 'लुक वेस्ट' दृष्टिकोण के रूप में विकसित हुई है। हालांकि, इस अस्थिर क्षेत्र में उपस्थित कई फॉल्टलाइन्स भारत की ओर से एक संतुलनकारी कार्यवाही की मांग करते हैं। चर्चा कीजिए।

India's ties with west Asia goes back to times where arab traders came to India since 3000BC. India considers this region as part of extended neighbourhood and therefore closely engages with it.

India's engagement

① Ties for energy security – 80% of oil supply and 95% of gas supply comes from this region.
– approach from traditional 'buyer-seller' to permanent investor like ONGC holding stake with ADNOC in UAE.
– gas pipelines – under water from Iran.

② Connectivity to central asia – through INSTC and Chabahar

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project

③ Huge Diaspora – of almost 8 million who are termed 'Real NRI' due to large sums of remittances they send.

④ Cultural and softpower diplomacy – like promoting yoga,

⑤ Long term security ties like agreement with Oman on access to Duqm port.

This multi-sectoral nature of engagement gives perception of 'Look West policy'.

MULTIPLE FAULTLINES :

① Hostilities and rivalries like Israel-Iran, Shia-Sunni, Saudi-Iran requires balancing act.

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② US anti-Iran approach - warning India to cut all oil supplies ~~and~~ after revoking JCPOA.

③ Violence and turmoil due to rise of ISIS after Arab spring.

④ Threat to security of diaspora - 39 Indians killed by ISIS, protective schemes like Nitaqat of Qatar requiring them to submit passport.

⑤ India's growing strategic - defence cooperation with Israel

Diplomacy is all about engagement to uphold our interests amid sea of challenges and this is what needs to be displayed here.

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19. The rapid diffusion of Artificial Intelligence begets unique opportunities and challenges for India. Discuss. What can be done to address these challenges? **(250 words) 15**

आर्टिफिशियल इंटेलिजेंस (कृत्रिम बुद्धिमत्ता) का तीव्र प्रसार, भारत के लिए विशिष्ट अवसर और चुनौतियां उत्पन्न करता है। चर्चा कीजिए। इन चुनौतियों का समाधान करने के लिए क्या किया जा सकता है?

Artificial Intelligence is a new emerging field in which 'machines are designed to think and take decisions like human ~~beings~~ beings'.

OPPORTUNITIES

① As recently released discussion paper of NITI aayog pointed out huge opportunities in field of agriculture (like precision farming), education, healthcare, ~~and~~ governance, disaster management etc.

② A booming start up ecosystem in the country (3rd largest number of startups in the world)

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③ Social inclusion like virtual assistant to support disabled.

CHALLENGES

① WB report 2015 predicted threat to 69% jobs in India

② Lack of trained manpower - In all India has only 51 skilled professionals in AI, mostly concentrated in IITs / IISCs and a very few in deep learning.

③ Lack of funding - unlike China which has dedicated mission mode projects.

SOLUTIONS :

① Need for a National AI policy - as also highlighted by Economic Survey 2017-18 to take maximum benefit of these horizon technologies.

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(2) Government need to permit foreign universities open campuses, itself collaborate with private sector to enhance trained manpower.

(3) A dedicated fund can be setup to provide support to AI startups.

It is said that:

'As new technology rolls over if you are not part of the roller, you are part of the road'. Therefore government need to adopt proactive approach towards such horizon technologies.

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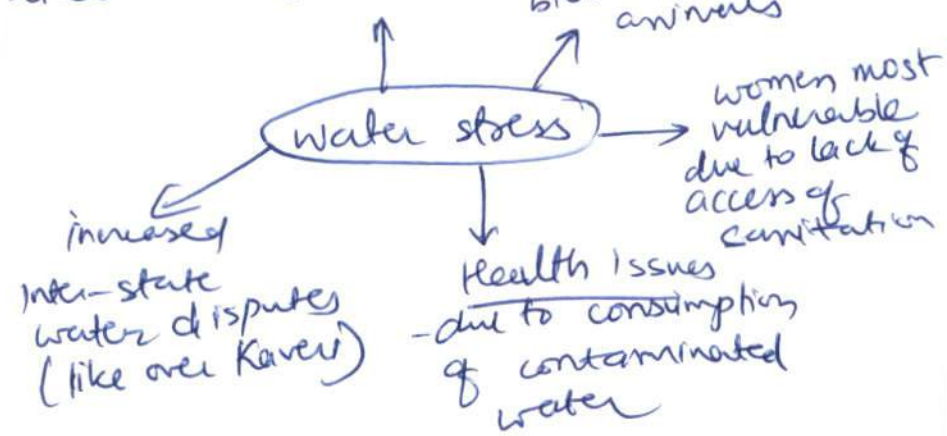
20. Water shortage in India has been sought to be addressed through various policy and technological interventions. Explain. Also, examine the benefits of desalination technology and the costs associated with it. **(250 words) 15**

भारत में विभिन्न नीतिगत और तकनीकी उपायों के माध्यम से जल की कमी की समस्या का समाधान करने के प्रयास किए जाते रहे हैं। व्याख्या कीजिए। साथ ही, विलवणीकरण प्रौद्योगिकी के लाभों एवं इससे संबद्ध लागतों का परीक्षण कीजिए।

UN Water data shows that by 2030, country is going to face severe ~~p~~ water shortage. Recently NITI Aayog composite water index also corroborated that all million plus cities are facing water stress.

This can have serious implications like —



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In order to achieve ~~SDG~~ SDG 6 — 'of safe drinking water and sanitation to all India has ~~started~~ ~~a~~ taken several measures like —

Policy —

① Model groundwater bill — making it community resource and not personal.

② Institutional reforms — like merger of CWC and CGWC to form National water commission, as per recommendation of Mihir Sen committee

③ Composite water ~~framework bill~~ index — by NITI aayog to promote competitive federalism.

④ 'Living status' to Ganga and Yamuna by Uttarakhand HC

⑤ Technological —

① Involving new technologies of waste management in 'Namami Ganga' mission.

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② Low cost water filtration for regions hit by Arsenic, fluoride contamination developed by CSIR.

③ Mandating rooftop rain water harvesting in all public building above a certain floor size.

Desalination technology

Benefits	Costs
(i) 70% of water is in oceans	(i) Huge cost and energy requirement
(ii) Known technology - already countries like Israel adopted it	(ii) Lack of indigenous technology.

Future lies in desalinisation therefore need for policy support in this direction.